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JAMES D. MAHER,
CLERK

In the

Supreme Court of the United States

OCTOBER TERM, A. D. 1918

No. [redacted]93

BERLIN MILLS COMPANY

Petitioner

vs.

PROCTER & GAMBLE COMPANY

Respondent

APPENDIX TO PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE SECOND CIRCUIT.

OPINIONS OF COURTS BELOW.

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—1919—

United States District Court

SOUTHERN DISTRICT OF NEW YORK.

PROCTER & GAMBLE COMPANY,
Complainant,

against

BERLIN MILLS COMPANY,
Defendant.

KERR, PAGE, COOPER & HAYWARD, Solicitors for Complainant, Alfred N. Allen, Livingston Gifford and Thomas B. Kerr, Counsel.

JOHN C. PENNIE, Solicitor for Defendant, Marcus B. May and John C. Pennie, Counsel.

AUGUSTUS N. HAND, District Judge:

This suit is for infringement of patent No. 1,135,351, granted to the complainant as assignee of John J. Burchenal on April 13th, 1915. The application for the patent was filed November 10th, 1910. The specification states that the invention is for a food product consisting of a vegetable oil, preferably cottonseed oil, partially hydrogenized and hardened to a homogeneous white or yellowish semi-solid clearly simulating lard.

Claims 1 and 2 alone are in issue and read as follows:

> "1. A homogeneous lard-like food product consisting of an incompletely hydrogenized vegetable oil.

"2. A homogeneous lard-like food product consisting of incompletely hydrogenized cotton-seed oil."

The special object of the invention is, according to the specification:

"* * * to provide a new food product for a shortening in cooking in which the liability to become rancid is minimized and in which the components of such vegetable oils which are inferior and detrimental to use as such a food product have been to a large extent converted into a higher and more wholesome form. All such vegetable oils contain glycerids of unsaturated fatty acids and among these notable quantities of fatty glycerids of lower saturation than olein. It is the presence of these glycerids of lower saturation that seriously affects the rancidity of the material. Oxidation is largely the cause of rancidity which oxidation weakens the fat at the point of absorption at the double bonds, and these glycerids of lesser saturation readily absorb oxygen from the air at ordinary temperatures while the more highly saturated glycerids, as olein, only absorb oxygen at elevated temperatures. It is evident, therefore, that oils or fats containing notable quantities of glycerids of linolic acid or of lesser saturation are distinctly inferior as an edible product to those containing a minimum of these glycerids with a larger per cent. of olein. On the other hand while it is important to get rid of the readily oxidizable glycerids of lower saturation, it is also important not to supply too large a per cent. of fully saturated glycerids.

"* * * In manufacturing this product cottonseed or other vegetable oil is caused to chemically absorb a limited amount of hydrogen by reacting on the oil with hydrogen in the presence of a catalytic agent and at an elevated temperature. The oil is preferably agitated in a closed vessel in the presence of an atmosphere of compressed hydrogen, a catalyser of finely-divided nickel carried by kieselguhr being maintained in suspension in the oil and its temperature being raised to about 155° C.

"According to the present invention, the amount of hydrogen absorbed is carefully regulated and limited. In practice, the operation is stopped when the oil has been converted into a product which cools to a white or yellowish semi-solid more closely resembling lard than do the commercial mixtures of cottonseed oil and animal oleo-stearin while in many respects the product is superior to the best leaf lard as a shortening. It is not so liable to become rancid and the product can be heated to a considerably higher temperature than lard without smoking or burning. The high temperature to which my product can be raised without smoking or burning makes the product ideal for frying, inasmuch as a crust forms almost instantly on the food fried, which prevents any absorption of the shortening. A lard-like product thus prepared from cottonseed oil has a saponification value of about 195 and an iodin value ranging from about 55 to about 80. The product having an iodin value of 55 has a titer of about 42° and a melting point of about 40° C, that having an iodin value of 80 has a titer of about 35° and a melt-

ing point of about 33° C. While but partially hydrogenized, containing from about 1.5% to 2.5% of additional hydrogen more than in the non-hydrogenized material, it shows no free cottonseed oil when subjected to the Halphen test, thereby differing from all commercial lard substitutes containing this oil. It contains from twenty to twenty-five per cent. of fully saturated glycerids, from five to ten per cent. linolin, and from sixty-five to seventy-five per cent. olein; and an average of a number of samples gives twenty-three per cent. of saturated fats, seven and five-tenths per cent. linolin and sixty-nine and five-tenths per cent. olein, while the cottonseed oil before treatment contained seventeen per cent. saturated fats, thirty-seven per cent. linolin and forty-six per cent. olein. It will thus be seen that I have produced an ideal food product which is high in olein, low in linolin and lesser saturated fats and with only enough stearin to make the product congeal at ordinary temperatures."

The complainant urges that Burchenal first taught the art that a partially hydrogenated vegetable oil, preferably cottonseed oil, was edible and was a useful lard substitute. It contends that prior to Burchenal's conception it was not known that hydrogenated cottonseed oil was edible and that the only processes then in use aimed at complete saturation and produced a hard non-edible product. Before discussing the prior art, I would say in general that Normann, whose patent will later be referred to, had already disclosed a method of hydrogenating oils, and had set forth in his specification that the process was progressive and involved "no secondary reaction." The method of

adding cottonseed oil to beef stearin for use as a lard compound was well known and much used, as it still is. The hydrogenation of cottonseed oil resulted in a reduction of the fluid and substitution of the solid fats. Normann's patent, as well as various experiments of scientists, indicated that the addition of hydrogen to cottonseed oil would result in the reduction or elimination of the fluid and substitution of solid or partially solid fats. No one has shown that the product resulting from such hydrogenation was ever non-edible or unsanitary in any respect.

The British patent No. 10,783 (1887), to Joseph Sears was for a lard substitute composed of refined unbleached cottonseed oil and a fat adapted to give a stiffness to the compound corresponding substantially to that of refined lard. The specification provided that the temperature should be raised sufficiently to melt the fat or stearin, the heated ingredients mixed and then chilled rapidly so as to prevent crystalization and separation. This general process was well known in the art before the date claimed for the invention of Burchenal and indeed is referred to in the patent in suit. A very large market for such lard-like compounds exists at the present time and has existed many years past.

The British patent No. 1515 of 1903, to Normann discloses a process for the reduction of glycerines resembling that of the patent to Burchenal. Normann's patent says that:

> "The property of finely divided platinum to exercise a catalytic action with hydrogen * * * is already known. * * * Recently Sabatier and Senderens of Paris have discovered that other finely divided metals will also exercise a cata-

lytic effect on hydrogen, viz.: iron, cobalt, copper and especially nickel."

"By causing acetylene, ethylene or benzene vapour in mixture with hydrogen gas to pass over one of the said metals (which had just been reduced in a current of hydrogen) the said investigators obtained from the unsaturated hydrocarbons, saturated hydrocarbons, partly with simultaneous condensation."

"I have found that by this catalytic method it is easy to convert unsaturated fatty acids into saturated acids."

"This may be effected by causing fatty acid vapours together with hydrogen to pass over the catalytic metal, which is preferably distributed over a suitable support such as pumice stone. It is sufficient, however, to expose the fat or the fatty acid in a liquid condition to the action of hydrogen and the catalytic substance."

"For instance, if fine nickel powder obtained by reduction in a hydrogen current, is added to chemically pure oleic acid, the latter heated over an oil bath and a strong current of hydrogen is caused to pass through it for a considerable time, the oleic acid may be completely converted into stearic acid."

"The quantity of the nickel thus added and the temperature are immaterial and will only affect the duration of the process. Apart from the formation of small quantities of nickel soap, which may be easily decomposed by dilute mineral acids, the reaction passes off without any secondary reaction. The same nickel may be used repeatedly. Instead of pure oleic acid, commercial fatty acids may be treated in the same manner. The fatty acid of tallow which

melts between 44 and 48° C. has an iodine number 35.1 and a yellow colour will after hydrogenation melt between 56.5 and 59°, while its iodine number is 98 and its colour slightly lighter than before, and it will be very hard."

"The same method is applicable not only to free fatty acids, but also to the glycerines occurring in nature, that is to say, the fats and oils. Olive oil will yield a hard tallow-like mass; linseed oil and fish oil will give similar results."

"By the new method all kinds of unsaturated fatty acids and their glycerides may be easily hydrogenized."

The Normann patent clearly discloses that oils may be completely hydrogenized, that the process is progressive and that it involves *"no secondary reaction,"* in other words, that cotton seed oil which starts edible remain so. The experiments and articles of Paul and Roth, which were alluded to at the trial, show that hydrogenization of oils including cotton seed oil was understood in the prior art.

Such being the state of the art, Edwin Cuno Kayser wrote Procter & Gamble from England that he had a process of considerable value and would like to talk to them about it; thereafter he came to America about November, 1907, bringing samples of hydogenized cottonseed oil. He showed these to Burchenal, the superintendent of Procter & Gamble. As a result of his visit, he made an arrangement under a preliminary contract of January, 1908, to experiment upon the hydrogenized cottonseed oil as a substitute for lard. The first project was apparently to use hydrogenated cotton-

seed oil as a compound to be added to a percentage of beef stearin and cottonseed oil. Burchenal says he had done no work in connection with hydrogenizing cottonseed oil before he saw Kayser. He testified that:

> "Mr. Kayser went out to our factory and made sketches as to the apparatus that would be necessary to carry on this work and the apparatus was ordered at once; a little plant was installed for experimental purposes and I think it was ready to operate sometime in January or February, 1908" (Deposition of Burchenal, page 11).

The defendant succeeded in obtaining contemporaneous memoranda as to some of Kayser's experiments from the records of Procter & Gamble. The first experiment was as follows:

> "Fat Hardening Process by E. C. Kayser.
>
> "First experimental lot was completed Jany. 17th, 1908. Fat treated—Summer Yellow Cotton-Seed Oil. Used Nickel Sulphate and Kieselguhr as described. Experiment was conducted by Mr. Kayser alone. He claims to have used about 1% Nickel Metal and 2% Kieselguhr.
>
> "M.P. of fat after 3 hrs. 55½° C.
>
> "M.P. of fat after 6½ hrs. 60.3° C.
>
> "Dr. Bender reports as follows:
>
> "Melting point of fat 60.3° C.
>
> "Hydrocarbons .33%.
>
> "Iodine value of fat 7.14%.
>
> The fat does not contain free fatty acids. This material is much superior to the samples from J. Crossfield & Sons which showed an

> iodine value of 52.26 and a melting point of 39.3° C. (The laboratory sample melted at 49.9° C). Their samples contained 5.12% free fatty acids and 2% hydrocarbons.
>
> "Mr. Kayser reports as follows: 'The melting point of fatty acid, prepared from first lot hardened cottonseed oil is 62° C. This is several points higher than I ever got before. Presumably the composition of your oil differs somewhat from that of the oil I handled formerly.'"

Another experiment by Kayser of the date of March 5, 1908, was also obtained from the Procter & Gamble records in which the following melting points appeared:

5 hrs. at ordinary pressure 42° C.
1½ hrs. at 60 lb. pressure 43° C.

Von Phul testified that Kayser told him in 1907 that he was getting up a patent for a food product and even Burchenal's own testimony shows that Kayser *supposed* that the product he was making was edible. If Kayser at first told him it was not edible he did so when they were negotiating and he wished to keep his process in the dark until he had arranged his terms. That Kayser's statement that it was not edible was not taken seriously by either party is shown by the following testimony:

> "Q887. But you did not know as a matter of fact whether it would be edible or not? A. I did not. Mr. Kayser stated that it would not be but that was his method of talking."

Both of these men were proceeding soon after Kayser's arrival in this country to develop hydrogenated cottonseed oil as a food product. Even if

the thought first occurred to Burchenal I cannot see that he did anything to carry it out in practice. Kayser's patent No. 1,004,035, application for which was filed March 20, 1908, disclosed the process which was employed to make the product covered by the patent in suit, and the specification for this Kayser patent contains the statement that "The time of treatment will vary with the progress realized and with the degree of saturation aimed at." It is to be remembered that Burchenal distinctly disclaimed in his testimony that he had anything to do with the invention of the process covered by the Kayser patents and we thus have a situation where Kayser invented the process and developed the product to the point where it was applicable to use as a food product. He came to America with a sample which as appears from the written record taken from the files of the complainant had a melting point of only 39 and developed other samples with melting points of but 42° and 43° in his March 5, 1908 experiments.

Moreover, it is to be remembered that Crossfield had employed Kayser to experiment in hydrogenating oil, that the former had been in close communication with Normann who had patented only four years before the process I have mentioned, and that Crossfield had so strenuously objected to the use by Procter & Gamble of the processes of Kayser that they were obliged to purchase their rights to them. It is also noteworthy that Kayser refused to testify in this case and that the witnesses as to the work of Kayser in America are officers or employees of the complainant. Under such circumstances the meagerness of the evidence which has been adduced to show that Burchenal had anything to do with the development of the lard-like food product which is the

subject of the patent in suit, coupled with his admission that the entire *process* under which it was made was the work of Kayser, is most significant and makes it impossible to find that Burchenal invented anything. The defendant has been embarrassed in its defence by many difficulties and has been obliged to go into the enemy's camp to secure almost all its ammunition. In spite of this, it has established that Kayser at the very beginning had developed not only a process but a product little differing from Crisco. Kayser remained with Procter & Gamble until well into 1910, and did not leave America until about July of that year. While there is some general evidence of what Burchenal and others did, or directed, I can find no real proof that anyone but Kayser did anything of substantial moment. No step was taken by Burchenal that could possibly amount to invention.

Complainant urges that the experiments of Kayser and the patents of Normann and Kayser aimed at complete saturation and that neither realized the importance of a partially hydrogenized product. But the process under which their products were made involved in its progress partial hydrogenation, and Kayser's patent No. 1,004,035 distinctly stated that "The time of treatment will vary with the progress realized and with the degree of saturation aimed at." Kayser as far as I can see did everything that was done to develop Crisco, and if his work fell short of this, he achieved enough so that the final step was inevitable to one skilled in the art. Kayser's process was the complainant's process and his product involved a progressive reaction fitted for any purpose. The broad discovery as between him and Burchenal certainly belongs to him.

Furthermore under any fair interpretation of the patent there is no infringement. The file wrapper indicates that the examiner rejected the claims as originally filed saying:

> "* * * If the problem of simulating lard from cotton-seed oil were presented to an oil chemist, an incomplete hydrogenization of the cotton-seed oil would at once suggest itself to him as a solution of the problem. All the claims are accordingly rejected on the * * * ground of lack of invention."

Thereafter new claims were rejected upon the Kayser patents for the reason *that his process could be arrested at any time to produce an incompletely hydrogenized product.* Then and for the first time Burchenal filed an amendment setting forth certain percentages of linolin olein and stearin which his product should contain. It seems quite evident therefore that Claims 1 and 2 of his patent would under such circumstances, if valid at all, be limited to substantially the chemical composition described in the amended specification. Indeed the specification closes with the statement that the inventor has produced a product which "is high in olein, low in linolin and lesser saturated fats and with only enough stearin to make the product congeal at ordinary temperatures."

Under such circumstances it is impossible to treat the melting point as practically the determining factor and if this is not done the defendants product Kream Krisp does not infringe. After the examiner had held that an incomplete hydrogenation would suggest itself to any chemist seeking to simulate lard and rejected the claims on Kayser, the patentee, as I have shown, amended by specifying a particular product and dwelling upon the advantages of a small percentage of linolin to

avoid rancidity. If, therefore, the inventor contributed anything to the art it was this special chemical composition which his patent discloses. Claims 1 and 2 should consequently be construed in the light of the proceedings of Burchenal before the Patent Office and not given a scope which would monopolize an art in which Normann, Kayser and others had been the real pioneers.

Kream Krisp has a chemical composition extremely remote from that described in the specification of Burchenal. The following are the relative percentages:

	Burchenal	Kream Krisp
% Saturated fats	20-25	28
% Olein	65-75	34.3
% Linolin	5-10	37.7

Thus it appears that Kream Krisp instead of being low in linolin is extremely high, and that instead of being high in olein as specified in the Burchenal patent, it has a percentage of olein which differs but little from that existing in refined cottonseed oil unhydrogenated. In fact Kream Krisp seems to present many of the objections referred to in Burchenal's specification and to lack the very things upon which the latter based his right to receive a patent. Indeed the composition is much closer to the lard compound Jewel made out of stearin and cottonseed oil than to Crisco.

The bill should be dismissed with costs because the patent is void for lack of invention and for the further reason that claims 1 and 2 if properly construed are not infringed by the defendant.

Dated, October 3, 1917.

A. N. H.,
D. J.

UNITED STATES CIRCUIT COURT OF APPEALS.

FOR THE SECOND CIRCUIT.

No. 10—OCTOBER TERM, 1918.

Argued October 10, 1918. Decided November 13, 1918.

THE PROCTER & GAMBLE COMPANY,
Appellant,
v.
BERLIN MILLS COMPANY,
Appellee.

Appeal from the District Court of the United States for the Southern District of New York.
Before WARD, ROGERS and HOUGH, Circuit Judges.

Appeal from a decree in equity entered in the District Court for the Southern District of New York.

The action is upon Claims 1 and 2 of Patent No. 1,135,351, issued April 13, 1915, to the plaintiff herein as assignee of John J. Burchenal, who is and long has been an officer of the corporate plaintiff. The claims are as follows:

> "1. A homogeneous lard-like food product consisting of an incompletely hydrogenized vegetable oil.
> "2. A homogeneous lard-like food product consisting of incompletely hydrogenized cottonseed oil."

The court below held in substance:

1. The disclosure did not amount to invention;

2. If there was invention Burchenal was not the inventor; and

3. Upon a proper construction of the claims in suit there was no infringement.

The Bill was accordingly dismissed and the plaintiff took this appeal.

LIVINGSTON GIFFORD for plaintiff-appellant.

JOHN C. PENNIE for defendant-appellee.

HOUGH, C. J.:

(1) The patent declares that

> "this invention is a food product consisting of a vegetable oil, preferably cottonseed oil, partially hydrogenized and hardened to a homogeneous white or yellowish semi-solid, closely simulating lard."

This is a description of a visible, tangible thing which for some years has been manufactured and sold by plaintiff, as to which there is no evidence that anybody else ever made it before, or that if this product is entitled to patent protection there is any closely related prior art.

Invention is denied first, on the ground once taken by an Examiner in the Office, namely, that "if the problem of simulating lard from cottonseed oil were presented to an oil chemist, an incomplete hydrogenization of the cottonseed oil would at once suggest itself to him as a solution of the problem." That is (a) the matter is said to be so obvious as not to rise to the dignity of invention.

Another objection is, that hydrogenation of vegetable oils was not new; and the discovery long prior to this application of catalysts not belonging to the "royal" group of metals had paved the way to effective and comparatively inexpensive hydrogenation. (Patent to Normann, British No. 1515 of 1903.) Prior to Burchenal's effective date it is admitted that the hydrogenic

saturation of oil by catalytic means had been practiced at least in well known laboratories, and a hard fat produced, solid at ordinary temperatures and showing on analysis a very large percentage of stearic or palmatic acid. It is obvious that if one starts with (*e. g.*) cottonseed oil, which is liquid at ordinary temperatures, because it has too little solid fat in it, and by chemical means so changes the molecular composition or arrangement of the substance as to increase the ratio of solid fat (*i. e.*, unites enough hydrogen with linolin and olein to produce stearin) and thus produces the hard fat commonly known as stearin;—there must have been a time during the development of the process when the union of hydrogen had only progressed far enough to convert the liquid into a semi-solid.

Therefore, it is said (b) that no man is entitled to a patent upon the thing or product which has always been produced when the process of making another thing or product was (say) half done.

The third objection to invention is substantially this:—the merit or value of what Burchenal claims and what this plaintiff makes and sells, is that it looks like lard, acts like lard, and can be used for the purposes of lard without offending the conservatism of chefs, housewives and maid-servants. But before Burchenal many imitation lards were made by mechanically mixing hard animal fats and cottonseed oil in varying proportions, and some of these mixtures show on analysis substantially the same chemical characteristics as are shown by Burchenal's chemically produced "homogeneous semi-solid". Therefore it is said that to make the same thing as had been made by earlier lard imitators but in a different way, cannot warrant a patent upon the resulting thing or product, whatever may be true in respect of the process by which that product is reached.

This is as much as to say (c) that the Burchenal article when completed and ready for use must be old, because other men had earlier arrived at the same chemical result by other paths.

Objection (a) raises the question of fact encountered in a large proportion of patent causes, and concerning which discussion is of small value if the record discloses no one who ever tried to do the same thing in the same way. When novelty in that sense appears the question really is one of measuring foresight by hindsight. The problem seems easy now, but when the object reached was desirable, useful and apt for commercial success, the bald fact that nobody ever did it before is persuasive, though not conclusive evidence of some invention. Burchenal's imitation lard has these attributes, and we consider it sufficient answer to the statement that any oil chemist could have done the thing, to note that no oil chemist did do it during the more than score of years prior to Burchenal's application when cottonseed oil (especially) as an abundant American product was endeavoring to supplant lard in the American market.

The next objection to invention (b) really denies the possibility of invention ever residing in noting or discovering a use for something which, if not a by-product, may be termed a half-product or unfinished product of an existing method of procedure. Without resorting to the extreme doctrine of *Potts v. Creager*, 155 U. S. 597, it seems to us that the question presented by this record depends upon whether the thing produced by partial hydrogenation is a different thing from that which existed before hydrogenation begun and that which would exsit when it ended. The change introduced by catalytic introduction of hydrogen is chemical; the analysis of cottonseed oil at divers stages of the process or

manufacture differs. To be sure, the difference is only in the union of additional atoms of hydrogen with the unsaturated fats (linolin and olein); but if this molecular and chemical change induces a resulting change in appearance, in utility and in texture, it may well be called, when lard-like, a thing different from what it was as oil, and equally different from what it would be at the point of saturation.

The patent law does not speak in terms of science, though scientific evidence is necessary for the application of its rules. The chemical composition of steam, water and ice is the same, but they are different things, and in the same commonsense way oil, lard and stearin are different things, although (with some chemical latitude) the oil may be said ultimately to become stearin, and to pass through the lard stage on the way.

For substantially the same reasons we think there is nothing in the last (c) objection to invention. It may be assumed as true that by the mixture of cottonseed oil and animal stearin a substance can be produced which for practical purposes is the same thing as Burchenal's chemically changed cottonseed oil; but one is a mixture and the other is not, and assuming the difference to be unimportant from the standpoint of either chemist or cook, it is a vital difference from that of the law.

We are therefore of opinion that there was invention in Burchenal's disclosure. Product patents may be justly subjected to critical scrutiny, but these claims are far within the border line adverted to in *Fonseca v. Suarez*, 232 Fed. Rep., 155; and just as the conversion of an abandoned machine into an operative and successful one by the introduction of new but simple features constitutes invention (*United Shirt Co. v. Beattie*,

147 Fed. Rep., 736), so we think that seizing upon thing A, which had been thing B, and was to become thing C, and utilized the half-made but different product amounted to an invention which is duly set forth in this application.

(2) The finding below, that Burchenal was not the inventor of whatever invention is revealed, is really a declaration that one Kayser did the inventing, and Burchenal for some inexplicable reason appropriated it. This is an affirmative defence and must be sustained by a fair preponderance of credible evidence. Burchenal swore to invention in the statutory form, and the presumption of validity extends to the mentlty of the inventor, for certainly nothing could be more completely invalid than a patent for invention to one who invented nothing.

The train of evidence resulting in the finding of non-invention in Burchenal is this: The plaintiff corporation is, and long before 1907 was a large manufacturer of soap. Down to that time it neither made nor dealt in food products, fatty or otherwise. In that year it received from England a letter from one Kayser saying that he intended coming to the United States to introduce "a new process of the greatest possible importance to soap manufacturers", and asking substantially for employment or remuneration if he was to communicate his valuable knowledge. He was employed, he divulged his process; it is a process for the hydrogenation of vegetable oils, and is one of the processes which when arrested (say) half way, produces Burchenal's "homogeneous lard-like product."

By the time this action was begun Kayser had returned to England (in 1910) and on or shortly after the outbreak of the present war was interned as an enemy alien.

While in this country he had assigned to the

plaintiff herein his applications for patents on processes of hydrogenation, had been paid for them, and became a stockholder in the plaintiff corporation. The defendants sent an agent to England, who interviewed Kayser and sought to extract from him evidence that he, and not Burchenal, either discovered or invented the food product before this court. Kayser refused all evidence, and in effect declined to either assert or assent to the proposition that he was the deviser or inventor of what Burchenal got a patent for.

There is no evidence that, during the whole period of Kayser's employment by the plaintiff and his experimentation upon fats, he either attempted to produce a "lard-like compound" or observed that such compound was obtainable by his process. There is some evidence (if it can be called by that name) that after Kayser had carried on experiments at plaintiff's factory for some time he showed to the deposing witness a fat "like tallow", looking as if it had been "moulded in a jelly glass", and that Kayser said in substance that "it was for cooking purposes." What Kayser showed may be regarded as evidence, but upon what principle the remarks of one who is neither a party nor a witness can be regarded as competent, we do not perceive.

Yet in this testimony there is nothing inconsistent with the course of events as plainly proven. When Kayser began to produce by his processes a hard fat, it occurred certainly to Mr. Procter (the plaintiff's president) and not improbably to Mr. Kayser himself, that since substantially saturated cottonseed oil was a fair commercial equivalent for animal stearin, that since frying and shortening compounds were largely manufactured by combining animal stearin with cottonseed oil, so they might be made by mechanically mixing the

liquid oil and hardened oil. Such experiment was tried, not at the factory of plaintiff, which had no machinery for the purpose, but at the establishment of one McCaw, who was already a manufacturer of lard-like compounds employing animal fat.

We are satisfied of the truth (entirely apart from all presumptions) of defendants' testimony that it was not until Kayser had returned to England, or was on the point of going, that it occurred to anyone that it was not necessary to first harden by hydrogenic saturation the cotton-seed oil and then mix it with the fluid article in order to make a lard-like compound;—but that the hardening process might be arrested in the manner and for the purposes disclosed by Burchenal's application.

Assuming now that this mental operation or discovery in the sense of the patent law (Walker on Patents, 5th Ed., Sec. 2) amounted to invention, we not only find no evidence that Burchenal was not the inventor, but it is a strain upon credulity to believe that when this plaintiff corporation might just as well have advanced an application in Kayser's name it deliberately preferred the fraud of prosecuting it in that of Burchenal.

It may be, and we think is, quite true that the evidence reveals Burchenal as not primarily a chemist, but a man of business deeply interested in the advancement of his corporation's prosperity. We recognize the fact that there is a fundamental difference between "new articles of manufacture and new articles of commerce"

> *Cerealine, etc., Co. v. Bates,* 101 Fed. Rep., 272;

and it may also be quite true that Burchenal's contribution to the sum of human knowledge grew

out of the trained businessman's observation of the possibilities of a chemist's process, which he was himself quite incapable of devising.

But just as it is immaterial whether a patentee "understands or correctly states the theory or philosophy of the mechanism which produces" his new result (*Van Epps v. United, etc., Co.*, 143 Fed. Rep., 869) so it is immaterial whether when Burchenal observed and seized upon as a new and useful thing a half hydrogenically saturated oil he was actuated rather by commercial instinct than acquired chemical knowledge. It is enough that he had both a mental conception and a tangible reduction to practice (*Corrington v. Westinghouse, etc., Co.*, 178 Fed. Rep., at 715), and that is all that the patent law requires. Quite possibly this patentee would never have conceived the thought, had he not watched Kayser, but he could and did get something out of Kayser's train of phenomena, which the latter neither thought of, nor reduced to practice.

(3) The final objection to a decree in plaintiff's favor is that properly construed the claims in suit are not infringed because (a) the defendant's product widely varies from that of the patent in the relative percentages of saturated fats, olein and linolin, (b) the process pursued by defendant in making its product differs radically from that said to be disclosed or assumed in the patent in suit, and (c) that said claims are to be regarded as strictly limited, if not substantially abandoned, through or by reason of the proceedings in the Patent Office as revealed by file wrapper contents.

As to the first point (a) it is enough to note that while the variation insisted upon is true, it must to negative infringement be at least a variation extending beyond the limits of a valid claim read in the light of the disclosure.

In this instance it is not denied that what the defendant makes and sells is not only lard-like, homogeneous in the sense of mixtureless, and wholly consisting of an incompletely hydrogenized cottonseed oil, but it is within the limits of iodin-value, titer and melting points specified in the application. Therefore it is an infringement.

It is true (b) that defendant's process of manufacture is very different from that of plaintiff, and we are willing to assume it different from and better than anything known to Burchenal or developed by Kayser. But this patent is upon a product, and if the product complained of is the patented article substantially as described, it makes no difference by what path or process, new or old, inferior or improved, the infringing product is manufactured.

General Electric Co. v. Laco-Phillips Co., 233 Fed. Rep., 96.

The contention (c) that the office proceedings were such as to limit or nullify the broad claims in suit amounts we think to this, viz.: when this application was filed in 1910 applicant demanded two claims which if anything are slightly narrower than the two now in suit. They were rejected by the primary examiner and thereafter many changes were made in the language of the claims submitted by way of amendment. In our opinion never at any time did the applicant acquiesce in the examiner's action, but consistently endeavored to obtain, and finally did obtain in the claims first above quoted, what he had in the first place asked for.

It is the acquiescence of an applicant and not the action of an examiner or of many examiners that surrenders to the public what the applicant first declares to be patentable invention. The very word "acquiescence" necessarily implies obed

ient action, perhaps enforced, but still submission on the petitioner's part. Here there never was any such acquiesence, and the patent as issued substantially contains in the claims in suit the originally propounded definition of invention. This is far within the rule enforced by us in *Kinnear, etc., Co. v. Wilson*, 142 Fed. Rep., 970, where a rejected claim was carried into and obtained grant in another patent. Here the claims rejected were at last substantially victorious in the same patent —apparently through a change in the examining personnel.

For the reasons stated the decree appealed from is reversed with costs both here and below, and the cause remanded with directions to enter a decree adjudging Claims 1 and 2 valid and infringed.

UNITED STATES CIRCUIT COURT OF APPEALS.

FOR THE SECOND CIRCUIT.

NO. 10—OCTOBER TERM, 1918.

Argued October 10, 1918. Decided November 13, 1918.

THE PROCTER & GAMBLE COMPANY,
Appellant,
v.
BERLIN MILLS COMPANY,
Appellee.

Appeal from the District Court of the United States for the Southern District of New York.
Before WARD, ROGERS and HOUGH, Circuit Judges.

Before—

WARD, ROGERS and HOUGH,
Circuit Judges.

WARD, Circuit Judge (dissenting):

I think the District Judge was right in holding the patent void for lack of invention. It was well known that a vegetable oil could be changed

chemically into a hard fat by hydrogenization and of course that at some stage of the process before complete hydrogenization it would be a homogeneous semi-solid. It was also known that the process would not affect the edibility of the product. The product at all stages of the process was therefore old and open to the public for any use of which it was capable. To apply it when semi-solid as a substitute for animal lard in cooking was no doubt novel and useful but was not in my opinion invention. To one skilled in the chemical art such a use was as obvious, if he thought about it at all, as were the many mechanical improvements which, though new and useful, have been held not to be inventions because within the capacity of those skilled in the particular art. There was nothing revolutionary about this new use. There was no crying need nor any problem to be met. The market was and still is abundantly supplied with mixtures of vegetable oils and animal fats which satisfactorily meet culinary needs. Yet the complainant is given a monopoly of all semi-solid homogeneous hydrogenized vegetable oils, however produced, when applied to culinary purposes.

Opinion on Petitions for Rehearing.

UNITED STATES CIRCUIT COURT OF APPEALS.

FOR THE SECOND CIRCUIT.

NO. 10—OCTOBER TERM, 1918.

Petition Filed December 20, 1918. Decided January 9, 1919.

THE PROCTER & GAMBLE COMPANY,
Appellant,
v.
BERLIN MILLS COMPANY,
Appellee.

Appeal from the District Court of the United States for the Southern District of New York.
Before WARD, ROGERS and HOUGH, Circuit Judges.

KERR, PAGE, COOPER & HAYWARD, for Appellant.
JOHN C. PENNIE, for Appellee; MARCUS B. MAY, of Counsel.

ON PETITIONS FOR REHEARING.

HOUGH, C. J.:

The principal producer of cottonseed oil has joined in this application as *amicus curiae* and by figures of oil production as well as of food products derived therefrom, has greatly magnified the importance of Burchenal's patent.

It seems to be now assumed that hydrogenized oil, as a substitute for lard, is so superior to an amalgam, combination or mixture, of oil and animal fat, or oil and stearin artificially produced—that the patent in suit is almost basic, instead of disclosing a mere variant among products of equal utility.

If this importance in result be real, it is a reason for giving to the claims in suit a broad range of equivalents; and suggests reflections not contained in our former opinion, but leading to an identical result.

Defendant's petition restates with painstaking ability and argument perfectly good, if the premise be admitted. That premise is that Burchenal invented nothing but an artificial lard or lard substitute so near to existing articles of commerce that the only field open to him was limited to a particular mode of making, or by specifically stated chemical tests.

The chemical tests or limits indicated in Burchenal's disclosure, are put with an "about"; they are not carried into the claims sued on, as they are into some not in suit; nor do all the usable and marketable specimens of defendant's factory show uniform tests. We adhere to the remarks concerning "iodine-values, titer and melting points" heretofore made, but do not and did not ground judgment thereon.

Our decision is and has been based, on a firm conviction, that what is practically lard, consisting solely of one vegetable oil in a state of arrested hydrogenation, is a new thing in the sense of the patent law; almost as new as a synthetic egg, evolved from vegetable albumen by chemical treatment.

The results of such evolutionary treatment are by their genesis so novel, that analysis of constituents is immaterial. Patentable novelty is not in their parts—as revealed by quantitative or qualitative analysis, but in a practical

functional identity between animal products, and a vegetable product as chemically changed.

Our view of the nature of this invention, permitted us to assume (not find) a possibly quite superior method as used by defendants;—but when the product was seen to be something that was (in effect) lard resulting from an arrested hydrogenation of cottonseed oil, there was infringement.

On this record, it may almost be said—that defendants' machines will cease to produce infringements, only when they yield what a plain man would not call lard.

Application denied.

ROGERS, J. concurs: WARD, J. not voting.

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No. 93.

IN THE

Supreme Court of the United States

October Term, 1920.

BERLIN MILLS COMPANY,

Petitioner,

vs.

PROCTOR & GAMBLE COMPANY,

Respondent.

Brief for The American Cotton Oil Company, as *Amicus Curiae*, in Support of Petition for Reversal of the Decree of the Circuit Court of Appeals.

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IN THE

Supreme Court of the United States,

OCTOBER TERM—A. D., 1920.

No. 93.

BERLIN MILLS COMPANY,
Petitioner.

vs.

PROCTER & GAMBLE COMPANY,
Respondent.

Brief for The American Cotton Oil Company, as Amicus Curiae, in Support of Petition for Reversal of the Decree of the Circuit Court of Appeals.

The American Cotton Oil Company requests leave to file this brief in support of the petition of the Berlin Mills Company for the reversal of the decree of the Circuit Court of Appeals and the affirmance of the decree of the District Court.

The District Court denied both patentability and infringement, and dismissed the bill. The Circuit Court of Appeals reversed by a divided court. Thus, the Judges who have heard this case are equally divided in opinion.

In view of the breadth of the ruling under review, the question is one of vital importance to great industries. It is of the most serious consequence to the industry on behalf of which this brief is submitted and to the general public at large. It concerns an essential food product having all the uses of lard and which, because of its cheaper price under normal business conditions, is more available to persons of moderate means.

The following figures for the calendar year 1918 (the latest complete figures available) will show the interests involved:

American Production	
Crude Cottonseed Oil.....	1,283,823,000 lbs.
Equivalent Refined Oil, about.	1,168,000,000 "
Production Lard Substitutes..	1,146,236,000 "
Production Hog Lard.....	1,008,757,000 "

Out of the entire amount of refined cottonseed oil produced in America, 1,015,051,000 pounds, or 87%, was used in the manufacture of lard substitutes, which for the year 1918 were of a value of $257,903,100.

All of these figures are official except the value of lard substitutes and production of refined cottonseed oil, both of which have been carefully prepared from reliable sources and are substantially correct.

The question involved in this case stands out clearly in the opinions below. It is one which goes to the root of the administration of the patent law in its relation to patents for products. It is a question which requires no analysis of the record to make clear, but is distinctly raised by the facts as they are conceded by the majority opinion in the Circuit Court of Appeals.

The question is this: If a patent is for a product and not for process, and the product is old, can the patent be sustained upon the ground that the product is made by a particular process? If the patent is for a product and not for process, and if the defendant's process is different from the complainant's process, and the defendant's product is more like the prior art products than it is like the patented product, should there be decree for infringement?*

It is not our purpose to review the history of the art and the scientific facts which are presented in a thorough and admirable manner in the brief for the petitioner, as we wish simply to emphasize those points which, in the light of the facts established by the record, we believe to be controlling.

Burchenal's patent in suit (Letters Patent, No. 1,135,351, dated April 13, 1915; Transcript, pp. following p. 502) has these claims:

> "1. A homogeneous lard-like food product consisting of an incompletely hydrogenized vegetable oil.
>
> "2. A homogeneous lard-like food product consisting of incompletely hydrogenized cottonseed oil."

The District Court held the patent void for lack of invention and also held that there was no infringement. Circuit Judge Ward, in his dissenting opinion in the Circuit Court of Appeals, pithily stated the point as to the invalidity of the patent. He said (Transcript, p. 779):

*For convenience we shall refer to the parties as complainant and defendant, the latter being the petitioner.

"I think the District Judge was right in holding the patent void for lack of invention. It was well known that a vegetable oil could be changed chemically into a hard fat by hydrogenation and of course that at some stage of the process before complete hydrogenation it would be a homogeneous semi-solid. It was also known that the process would not affect the edibility of the product. The product at all stages of the process was therefore old and open to the public for any use of which it was capable."

Upon the point of non-infringement District Judge A. N. Hand, referring to the defendants' product under its trade designation of Kream Krisp, said (Transcript, p. 765):

"After the examiner had held that an incomplete hydrogenation would suggest itself to any chemist seeking to simulate lard and rejected the claims on Kayser, the patentee, as I have shown, amended by specifying a particular product and dwelling upon the advantages of a small percentage of linolin to avoid rancidity. If, therefore, the inventor contributed anything to the art it was this special chemical composition which his patent discloses. Claims 1 and 2 should consequently be construed in the light of the proceedings of Burchenal before the Patent Office and not given a scope which would monopolize an art in which Normann, Kayser and others had been the real pioneers.

"Kream Krisp has a chemical composition extremely remote from that described in the specification of Burchenal. The following are the relative percentages:

	Burchenal	Kream Krisp
% Saturated fats	20-25	28
% Olein	65-75	34.3
% Linolin	5-10	37.7

"Thus it appears that Kream Krisp instead of being low in linolin is extremely high, and that instead of being high in olein as specified in the Burchenal patent, it has a percentage of olein which differs but little from that existing in refined cottonseed oil unhydrogenated. In fact Kream Krisp seems to present many of the objections referred to in Burchenal's specification and to lack the very things upon which the latter based his right to receive a patent. Indeed the composition is much closer to the lard compound Jewel made out of stearin and cottonseed oil than to Crisco.

"The bill should be dismissed with costs because the patent is void for lack of invention and for the further reason that claims 1 and 2 if properly construed are not infringed by the defendant."

In short, the product is old and the defendant's process is not like that of the complainant; and if the claims of the patent could be saved by limiting them to the special chemical composition which the patent discloses, there is no infringement as the defendant's product is extremely remote from the patented product and is much closer to the prior art products.

These propositions, we submit, are not met by the majority opinion below. On the contrary, the concessions of that opinion—concessions which the record compelled—are at war with the conclusions reached.

FIRST.—The decision of the Circuit Court of Appeals, in respect of infringement, rests upon the ground that the patent is upon a product and not upon a process. It was upon that ground that the Court found infringement, despite the concession that the defendant's process was very different from that of the complainant.

The majority opinion in the Court below states:

> "It is true (b) that defendant's process of manufacture is *very different from that of plaintiff*, and we are willing to assume it different from and better than anything known to Burchenal or developed by Kayser. *But this patent is upon a product, and if the product complained of is the patented article substantially as described, it makes no difference by what path or process, new or old, inferior or improved, the infringing product is manufactured.*" (Transcript, p. 778. Italics ours.)

Had the process been the subject of the patent, it is admitted that the complainant must have failed. The process described in the specification was an old process. It had been invented and patented in England (*Normann*, British patent No. 1515 of 1903, Transcript, p. 584) and brought to this country. (See Brief for petitioner, Appendix pp. 106 *et seq.*) Burchenal made no claim of invention, so far as the process is concerned (*id.*, pp. 114-116). Moreover, as the Court below says, defendant's process is "very different from that of plaintiff."

Burchenal's patent was for a *product*. The patent states that the invention is a "*food product*". Both claims are for a "*food product*".

And, in this character, the claims must stand or fall.

The Court below took this view of the patent in determining infringement, but departed from its own test when it determined patentability. It would seem to be clear that if in determining infringement, we are to consider the defendant's product as such, irrespective of the process of manufacture,—without regard to what "path or process, new or old, inferior or improved" has been used in manufacture—we must consider the *prior art products* in the same way in determining the question of patentability. We cannot bring in *process* any more in the one case than in the other. And similar variations in the product itself are not to be regarded as controlling in the one case and negligible in the other. Either *process* or *product* is to be taken as the subject of the patent, and if it is *product* and not *process*, then in dealing with the prior art, as in dealing with the defendant's product, it is *product* and not *process* that must be considered.

SECOND.—In order to find infringement, the Court below was compelled to disregard the differences between the product of the patent, as a product, and the defendant's product, and the claims of the patent in suit as thus broadly conceived are without validity in the light of the admitted prior art. The defendant's product more closely resembles the prior art products than it does the product of the patent.

Not only is the process of the defendant different from the process of the complainant, but the product of the defendant, considered as *product*, is different in its precise chemical characteristics from the product of the patent.

There is no room for controversy upon this point. In order to ascertain the identity of compounds, such as oils and fats, aside from their uses, one naturally has recourse to a chemist who subjects them to the usual analyses or tests. The patent in suit prescribes certain tests, which are commonly used in oil and fat analysis to identify the patented product, and by these prescribed tests, as the record shows and as found by the District Court, the defendant's product is substantially unlike the patented product.

We desire to call particular attention to the diagram, illustrating these differences, which is opposite page 68 of the petitioner's brief. To use the language of the District Court in stating facts which admit of no contradiction, the defendant's product "instead of being low in linolin is extremely high", and "instead of being high in olein as specified in the Burchenal patent, it has a percentage of olein which differs but little from

that existing in refined cottonseed oil unhydrogenated". The defendant's product lacks the very things upon which Burchenal "based his right to receive a patent." (Transcript, p. 765.)

It was the distinctive claim of the patent in suit that the product was "*lard-like*". That is, it was sought to justify invention by virtue of a chemical composition which distinguished the patented product from prior commercial mixtures or the artificial lard of the prior art by reason of a closer resemblance to lard. The defendant's product, "Kream Krisp", however, is not "*lard-like*" in this sense, but must be identified with the artificial lard of the prior art. This so clearly appears from the diagram to which we have referred that argument would seem to be unnecessary. The olein in the patented product is from 65 to 75 per cent; in the defendant's product, 34.3 per cent. The linolin in the patented product is from 5 to 10 per cent; in the defendant's product, 37.7 per cent. The specification states that the iodin value of the patented product ranges from "about 55 to about 80" (*id.* opposite p. 503); the iodin value of the defendant's product is 94.7 (*id.* p. 358). The specification states the titer of the patented product to be within a range of about 35° to 42° (*id.* pp. opposite p. 503); the titer of the defendant's product is 33.85 (*id.* p. 358).

The defendant's product also has the same liability to grow rancid that characterized the artificial lard of the prior art (*id.* p. 449), and in this respect the defendant's product is unlike the patented product and lard itself.

In the majority opinion of the Circuit Court of Appeals it is stated that what the defendant makes "is not only lard-like, homogeneous in the sense

of mixtureless, and wholly consisting of an incompletely hydrogenized cottonseed oil, but it is within the limits of iodin value, titer and melting points specified in the application" (*id.* p. 778). But it is manifest from the uncontroverted facts, that the defendant's product is not "lard-like" in the sense that the product of the patent is claimed to be "lard-like", if the product of the patent is to be distinguished in this respect from the prior art products. It is only by taking the *prior art products* as "lard-like" and thus destroying the basis of the patent in suit, that it can be said that the defendant's product is an infringement because *"lard-like"*. Again, it is an error to say that the defendant's product is "homogeneous in the sense of *mixtureless"*. We submit that there is no warrant in the record for this statement. The defendant's product is homogeneous only in the sense that the prior art products are homogeneous. The defendant's product is not mixtureless, but is unquestionably a *mixture*. The fact that a portion of the oil has been hydrogenized to a solid fat does not alter the fact that the product itself is a mixture of the original oil with that portion which has thus become solid fat. The increase of the solid fat does not make the product itself any the less a mixture. It consists of a mixture of cottonseed oil and hard fat. In fact, lard itself, the artificial lard of the prior art, and the product of the patent are all mixtures. But the defendant's product is not only a *mixture*, but as a mixture it must be classed with the prior art products rather than with the product of the patent, as it more closely resembles the former than the latter. And if the product of the patent is to be regarded as "lard-like" in any sense that entitled it to dis-

tinction as a product, then the defendant's product is not like it in this respect.

On the petition for rehearing in the Court below, the statements in the opinion of the Court as to the defendant's product being within the limits of iodin value and titer specified in the application for the patent in suit were called to the attention of the Court as not being accurate. The Court then delivered a supplementary opinion in which it was explained that the chemical tests or limits indicated in Burchenal's disclosure were put with an "*about*", and that they were not carried into the claims sued upon. While the Court, with this explanation, adhered to its statement, it was careful to say that it "did not *ground judgment* thereon" (*id.* p. 802). The Court below was thus brought to a statement of what it *did* "ground judgment" upon and this was stated to be that the product of the patent was "*practically lard*". And in this view it was stated that "defendant's machines will cease to produce infringements, only when they yield *what a plain man would not call lard*" (*id.* p. 803).

We thus have the point of the decision that the patent is for a product which is "*practically lard*", and that if the defendant produces what a plain man would call "lard", it must be regarded as an infringer despite the conceded differences between its product and the product of the patent, and despite the admission that its process is very different from the process described in the patent.

The sweep of this conclusion of the Court, thus maintaining the grasp of the patent upon the product in question, irrespective of processes and of the palpable differences in the product itself, is manifest. It is also clear that in establishing

this criterion of infringement, the Court has disregarded not only the differences between the defendant's product and the product of the patent in suit, *but also the resemblances between the defendant's product and the prior art products.* It cannot be doubted that if the plain man would call the defendant's product *lard*, he would also call "lard" the artificial lard of the prior art. For certainly no plain man could distinguish between the artificial lard compounds of the prior art and the defendant's product. A glance at the diagram to which we have referred would dispel any doubt upon that point. Comparing *thing* with *thing*, that is, *product* with *product*, the plain man could not put the defendant's product and the product of the patent into the same class as "lard" without putting into the same category the prior art products.

It is clear that the Court, on the petition for rehearing, found it impossible to maintain the decree for infringement upon a consideration of the *special characteristics* of the product of the patent, whether with regard to chemical composition or as to utility, for any distinctions which could be established in these respects would necessarily protect the defendant from the charge of infringement, and, in applying the broad test which made all the differences in the two products immaterial, the Court destroyed the basis of its own finding of validity.

We thus come to the fundamental question: *If the complainant's claims are broad enough to cover the defendant's product, upon what ground can the patent be sustained?*

That is, comparing *product* with *product*, and not *process* with *process*, what is there which

would bring the defendant's product within the range of the claims of the patent in suit and exclude the prior art products?

We are not introduced into any field of permissible controversy upon this point. The tabulated comparison of the patented product, the prior art artificial lard and the defendant's product is as follows (*id.*, 358, *et seq.*; Diagram in petitioner's Brief Opp. p. 68):

	Patented Product	Prior Art Product	Defendant's Product
Percent solid fats	20-25	29.5	28
Percent olein	65-75	29.	34.3
Percent linolin	5-10	41.5	37.7

It is thus apparent that if the claims of the patent reach the defendant's product, as *product*, they are anticipated by the prior art products, as *products*.

Is the difference to be found in *chemical characteristics?* The answer must be in the negative, for if account is to be taken of such differences, it is apparent that the chemical characteristics of defendant's product are more like those of the prior art products than they are like those of the patented product. As the Circuit Court of Appeals said in its opinion:

> "But before Burchenal many imitation lards were made by mechanically mixing hard animal fats and cottonseed oil in varying proportions, and some of these mixtures show on analysis substantially the same chemical characteristics as are shown by Burchenal's chemically produced 'homogeneous semi-solid' " (Transcript, p. 774).

This definite statement of the Court below cannot be regarded as a mere tentative assumption in stating an objection. For while it appears in connection with the statement of one of the objections to invention, the fact itself is explicitly set forth and conceded. It is not a part of the reasoning of the objection, but the fundamental fact upon which the objection rests; and this basis of the objection is treated as a fact by the Court below, because it could not be gainsaid.

Is the difference to be found in the *utility* of the product? Clearly not, as the so-called commercial mixtures or prior art products serve the same purposes. We are dealing with *lard substitutes*. And if the actual differences between the defendant's product and the patented product can be regarded as immaterial from the standpoint of the patent, the same reasoning must be applied to the prior art products or lard substitutes. The unquestioned fact is clearly stated by the Court below in its opinion (*id.*, p. 775):

> "It may be assumed as true that by the mixture of cottonseed oil and animal stearin *a substance can be produced which for practical purposes is the same thing as Burchenal's chemically changed cottonseed oil*" (Italics ours).

Here, again, is an explicit statement of a fact to be assumed because it was a fact that was incontrovertible. If, then, it can be said, despite the existing differences between the defendant's product and the patented product, that the claims of the patent reached the former, it necessarily follows that, considered as *product*, whether with

reference to chemical characteristics or to utility, the prior art products anticipated the product of the patent. If the defendant's product is within these claims because a *"plain man"* would call it *"lard"*, as there was no sufficient differentiation either with regard to composition or practical use to take it out of that category, then, upon the same fact, it necessarily follows that the patent was without invention, as the prior art products were what the plain man would undoubtedly call lard. The reasoning of the Court in finding infringement was self-destructive, because it necessarily led to the conclusion, in the light of the prior art, that the patent was invalid for lack of invention.

THIRD.—We submit that the conclusion is unescapable that, while process was disregarded by the Court below in considering the question of infringement, it was treated as of controlling importance in determining the question of patentability.

In considering the question of invention the Court below dealt with three objections, which the Court thus summarized, (a) that the matter was so "obvious as not to rise to the dignity of invention"; (b) that no one was "entitled to a patent upon the thing or product which has always been produced when the process of making another thing or product was (say) half done"; and (c) that the Burchenal article when completed and ready for use "must be old, because other men

had earlier arrived at the same chemical result by other paths" (*id.*, pp. 774, 775).

The Court was of the opinion that the first question was really one "of measuring foresight by hindsight." But in what sense is it to be said that there was either foresight or hindsight? With respect to *product* or with respect to *process*? It was deemed a sufficient answer to the statement "that any oil chemist could have done the thing" to note "that no oil chemist did do it during the more than a score of years prior to Burchenal's application when cottonseed oil (especially) as an abundant American product was endeavoring to supplant lard in the American market."

But what was it that "any oil chemist *could have done*" and that "no oil chemist *did*"? So far as *product* was concerned, in chemical characteristics and in utility it existed in the prior art products by way of anticipation just as clearly as it existed in the defendant's product by way of alleged infringement. The distinction, it is submitted, is not with respect to *product*—if there is in this case any basis for a claim of infringement —but with respect to *process*. It was precisely and only in the process that the oil chemist *did* what it is said *had not been done* before. He produced the same product in a new way, if it could possibly be said that arrested hydrogenation was a "new way."

In dealing with objection (b), the Court below considered that the question presented depended "upon whether the thing produced by partial hydrogenation is a different thing from that which existed before hydrogenation began and that which would exist when it ended." Here it appears the Court was dealing with the comparison

of products, but not, even here, with a comparison of the product which is the subject of the patent and the prior art products as such, either with respect to chemical characteristics or practical uses. The Court, in considering this second objection, was dealing with the question whether "the possibility of invention" ever resides "in noting or discovering a use for something which, if not a by-product, may be termed a half-product or unfinished product of an existing method of procedure." This objection, as defined by the Court, went only to the point that as hydrogenation of vegetable oils was not new, there must have been a time "during the development of the process when the union of hydrogen had only progressed far enough to convert the liquid into a semi-solid."

But it is evident that this is only a partial view of the defendant's contention, and, however the particular point be dealt with, the objection still remains whether the *product* itself—the subject of the patent—was not old because substantially the same thing had been arrived at by other paths.

This brings us to objection (c). This was the crucial objection which brought under consideration the prior art products with their similar utility and their chemical characteristics so closely resembling those of the defendant's product. And it is the answer to *this* objection that discloses what we submit was the fundamental error of the reasoning.

Speaking of the third objection to patentability, the Court below said (*id.*, p. 775):

> "It may be assumed as true that by the mixture of cottonseed oil and animal stearin *a substance can be produced which for prac-*

tical purposes is the same thing as Burchenal's chemically changed cottonseed oil; but one is a mixture and the other is not, and assuming the difference to be unimportant from the standpoint of either chemist or cook, it is a vital difference from that of the law" (Italics ours).

This we conceive to be the pith of the matter. And the difference of the law, if there be one, we submit is not at all with respect to *product* but with respect to *process*.

So far as the product is concerned, the question of the law is the question of chemist and of cook. The question of the law, in dealing with product, irrespective of process, is a question of identity and a question of utility.

If the differences between the defendant's product and the patented product with respect to *chemical characteristics* or with respect to *lard-likeness* are not deemed to be material, from the standpoint of the patent in suit, then the differences between the prior art products and the patented product with respect to chemical characteristics and lard-likeness are likewise immaterial, for here we find the defendant's product and the prior art products similar to each other, and alike in their differences as compared with the patented product. In dealing with lard substitutes, assumed to have substantially the same chemical characteristics and to have such a common lard-likeness that "for practical purposes" the substance is the same, it may be said quite as well with respect to the question of patentability of the product as with respect to infringement of the patent that "it makes no difference by

what path or process, new or old, inferior or improved, the product is manufactured."

We repeat that when neither chemist nor cook can regard the difference in the lard substitutes as important, the question of law, if there be one with respect to patentability, is necessarily one of *process* and not of *product*.

It is said that while the prior art products and the patented product are for practical purposes the same substances, the one is a "mixture" and the other is not.

But what is a *"mixture"*? It must either be defined in terms of process or in terms of product. The definition in terms of process is immaterial here for we are not dealing with a process patent. We are comparing a *thing* with a *thing*, not a process with a process. In dealing with the patented product, as *product*, if it appears that substantially the same *thing* for the same *uses* had been produced before, it is submitted that it makes no difference whether the same thing thus produced had been produced in one way or another. The process is not carried over into the product, when we are dealing with a product patent, for, as the Court below has said, it makes no difference by what path that product had been arrived at. Hence it is immaterial, we submit, that the prior art product is a *"mixture"* (i. e., produced by an *act* of mixing), and the patented product is not, for we are not looking to the means or to the process by which the product was obtained. In truth—as the counsel for the petitioner have abundantly demonstrated in their brief by an exhaustive presentation of the scientific facts—the patented product is itself a mixture, and the attempted distinction between the products, as being either mix-

tures or not mixtures, is illusory. But if the distinction could be maintained, the difficulty would not be surmounted, for the distinction would be essentially one of process. Considered as *product*, the defendant's product belongs in the same class with the prior art products; it is to be distinguished therefrom only by the process of production. And, if process is the distinguishing feature, there is no infringement, as the process of the defendant is "very different" from that of the complainant and the patent is for a product and not for a process.

So far as the products are concerned—complainant's, prior-art, and defendant's—we reiterate it makes no difference whether they have been produced by an act of mixing or by the act of hydrogenizing, for, in the last analysis, they are all semi-solid mixtures of solid and liquid fats, and, according to the Court below, in its test of infringement, the differences between them are unimportant, and they are for practical purposes the same thing.

> "It is quite obvious that a manufacture, or a product of a process, may be no novelty, while, at the same time, the process or agency by which it is produced may be both new and useful—a great improvement on any previously known process, and, therefore, patentable as such. * * *
>
> "A product or a manufacture had been obtained and had been used in the arts, a manufacture which was the same in kind and substance, and fitted for the same uses as the article of which the complainants now claim a monopoly. That this manufacture may have been the product of one or more different processes is, as we have said, quite immate-

rial in considering the question whether it is the same as that produced by the complainants."

The Wood-Paper Patent case, 23 Wall, 566, 593-595.

See also,

Cochrane v. *Badische Anilin & Soda Fabrik,* 111 U. S. 293;
Merrill v. *Yeomans,* 94 U. S. 568;
Powder Co. v. *Powder Works,* 98 U. S. 126;
Grant v. *Walter,* 148 U. S. 547.

Of course, if the word "mixture" is used as a mere designation of the product itself, and not as referring to the process by which the product is made, it is without significance for the present purpose, for in considering the patentability of the plaintiff's product, as compared with the prior art products, we are looking at the *thing* and not at its name or at the term which is used to describe it.

We earnestly urge that to say that there is invention, and hence a valid product patent, although the same substance for the same uses had been produced in the prior art, because the latter was a "mixture" and the patented product was not, and thus to establish patentability upon the basis of process, while at the same time predicating infringement upon product irrespective of process, is to create a fatal inconsistency. We simply ask that the same rule be applied in determining *patentability* in the light of the prior art

as is applied in determining the question of *infringement.*

If the process of manufacture is to be brought in to create a difference, then it must be brought in to exclude defendant's product as well as to exclude the prior art products. If process is not to be brought in, then a holding that the claims of the patent are broad enough to cover defendant's product leads necessarily, we submit, to the conclusion that the claims, in the light of the prior art, cannot be sustained.

> "That which infringes, if later, would anticipate, if earlier."
>
> *Peters* v. *Active Manufacturing Company,* 129 U. S., 530, 537.
> *Miller* v. *Eagle Manufacturing Company,* 151 U. S. 186, 203.

"Arrested hydrogenation" is a description of a process. If by arrested hydrogenation a certain thing is produced, and the patent is for that *product,* or *thing,* then the fact that it is produced by "arrested hydrogenation" has no significance.

Whether regard be had to chemical characteristics, to lard-likeness, or to practical uses, the reasoning which brings the defendant's product within the claims of the patent condemns the patent itself. If it is a *product* patent for one purpose it is a *product* patent for all purposes.

The decree of the Circuit Court of Appeals should be reversed and that of the District Court affirmed.

Respectfully submitted,

SULLIVAN & CROMWELL,

Solicitors for The American Cotton Oil Company.

CHARLES E. HUGHES,

ROYALL VICTOR,

Of Counsel.

Office Supreme Court, U. S.
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IN THE

Supreme Court of the United States

OCTOBER TERM—A. D. 1918.

No. 964 3 93

BERLIN MILLS COMPANY,
Petitioner,

vs.

PROCTER & GAMBLE COMPANY,
Respondent.

MEMORANDUM FOR AMERICAN COTTON OIL COMPANY, AS AMICUS CURIAE, IN SUPPORT OF PETITION FOR WRIT OF CERTIORARI.

SULLIVAN & CROMWELL,
Solicitors for American
Cotton Oil Company.

CHARLES E. HUGHES,
ROYALL VICTOR,
of Counsel.

IN THE

Supreme Court of the United States

OCTOBER TERM—A. D., 1918.

No.

BERLIN MILLS COMPANY,
Petitioner.

vs.

PROCTER & GAMBLE COMPANY,
Respondent.

Memorandum for American Cotton Oil Company, as Amicus Curiae, in Support of Petition for Writ of Certiorari.

The American Cotton Oil Company requests leave to file this memorandum in support of the petition of the Berlin Mills Company for a writ of certiorari.

The District Court denied both patentability and infringement, and dismissed the bill. The Circuit Court of Appeals reversed,—by a divided court. Thus, the Judges who have heard this case are equally divided in opinion.

The question is one of vital importance to great industries. It is of the most serious consequence to the industry on behalf of which this memorandum is submitted. The following figures for the calendar year 1917 will show the vast interests involved:

Total American Production Crude Cotton Seed Oil ..	1,339,482,257 Lbs.
Equivalent Refined Oil (about)	1,239,958,725 "
Total Production Lard Substitutes	1,173,446,000 "
Total Production Hog Lard ..	873,798,000 "

Out of the entire amount of refined cotton seed oil produced in America 1,069,214,000 lbs., or more than 86%, was used in the manufacture of lard substitutes, which for the year 1917 were of a value of $208,286,000.

All of these figures are official except the value of lard substitutes and production of refined cotton seed oil, both of which have been carefully prepared from reliable sources and are substantially correct.

The question involved in this case stands out clearly in the opinions below. It is one which goes to the root of the administration of the patent law in its relation to patents for products. It is a question which requires no analysis of the record to make clear, but is distinctly raised by the facts as they are conceded by the majority opinion in the Circuit Court of Appeals.

The question is this: If a patent is for a product and not for process, and the product is old, can the patent be sustained upon the ground that the product is made by a particular process? If the patent

is for a product and not for process, and if the defendant's process is different from the plaintiff's process, and the defendant's product is more like the prior art products than it is like the patented product, should there be decree for infringement?

The case is not only important in itself, but it involves a fundamental principle relating to patents for products, and we earnestly ask the Court to exercise its reviewing power to the end that the claims under a patent for a product shall have suitable limitation in the interest of administration in accordance with the statute.

FIRST.—The decision of the Circuit Court of Appeals, in respect of infringement, rests upon the ground that the patent is upon a product and not upon a process. It was upon that ground that the Court found infringement, despite the concessions that the defendant's process was very different from that of the plaintiff.

The majority opinion in the Court below states:

> "It is true (b) that defendant's process of manufacture is *very different from that of plaintiff*, and we are willing to assume it different from and better than anything known to Burchenal or developed by Kayser. But this patent is upon a product, and if the product complained of is the patented article substantially as described, *it makes no difference by what path or process, new or old, inferior or improved, the infringing product is manufactured.*" (Opinion, C. C. A., Appendix to Petition, page 10. Italics ours.)

If, however, in determining infringement, we are to consider the defendant's product, as such, irre-

spective of the process of manufacture, we must consider the prior art products in the same way in determining the question of patentability. We cannot bring in *process* any more in the one case than in the other. And similar variations in the product itself are not to be regarded as controlling in the one case and negligible in the other. Either *process* or *product* is to be taken as the subject of the patent, and if it is *product* and not *process*, then in dealing with the prior art, as in dealing with the defendant's product, it is *product* and not *process* that must be considered.

SECOND.—The defendant's product, as a product, in its precise chemical characteristics is like the products of the prior art and unlike the patented product.

In order to ascertain the identity of compounds, such as oils and fats, aside from their uses, one naturally has recourse to a chemist who subjects them to the usual analyses or tests. The patent in suit prescribes certain tests, which are commonly used in oil and fat analysis, to identify the patented product, and by these prescribed tests, as the record shows and as found by the District Court, the defendant's product is substantially like the prior art products, considered chemically, and substantially unlike the patented product*. These chemical variations between the patented product on the one hand and the defendant's product and the products of the prior art on the other hand, however, the Court of Appeals has held to be unim-

*"Kream Krisp [Defendant's product] has a chemical composition extremely remote from that described in the specification of Burchenal" (patentee of patent in suit). Judge Hand in the decision of the District Court.

portant from the standpoint of either chemist or cook, in considering the questions of infringement and patentability. Yet the Court held defendant's product to infringe the patent, and the prior art patents not to anticipate it, not because of identity or lack of identity, but, because in producing the defendant's product, an act of hydrogenizing was employed (though "very different from that of plaintiff's"), and in producing the prior art patents an act of mixing was employed.

Considered as *products,* with respect to the claims of the patent in suit, these prior art products are in the same class with defendant's product. Process, *ex hypothese,* is to be disregarded; and the variations in the products themselves, which are shown by the prior art products when compared with the patented product, are no more material or significant than those which are disclosed by a comparison of the defendant's product with the patented product.

Comparing *product* with *product,* and not *process* with *process,* what is there which would bring the defendant's product within the range of the claims of the patent in suit and exclude the prior art products?

Is the difference to be found in *chemical characteristics?* The answer must be in the negative, for if account is to be taken of such differences, it is apparent that the chemical characteristics of defendant's product are more like those of the prior art products than they are like those of the patented product. As the Circuit Court of Appeals has said in its opinion:

> "But before Burchenal many imitation lards were made by mechanically mixing hard ani-

mal fats and cottonseed oil in varying proportions, and some of these mixtures show on analysis substantially the same *chemical* characteristics as are shown by Burchenal's chemically produced 'homogenous semi-solid.'" (Opinion, C. C. A., Appendix to Petition, page 3. Italics ours.)

Is the difference to be found in the *utility* of the product? Clearly not, as the so-called commercial mixtures serve the same purposes. We are dealing with *lard substitutes.* And if the actual differences between the defendant's product and the patented product can be regarded as immaterial from the standpoint of the patent, the same reasoning must be applied to the prior art products or lard substitutes. The unquestioned fact is clearly stated by the Court below in its opinion:

> "It may be assumed as true that by the mixture of cottonseed oil and animal stearin *a substance can be produced which for practical purposes is the same thing as Burchenal's chemically changed cottonseed oil.*" (Opinion, C. C. A., Appendix to Petition, page 5. Italics ours.)

But if no distinction can be taken with respect to *utility,* and if no distinction can be taken with respect to *chemical characteristics,* which does not remove the defendant's product from the grasp of the patent in suit, then in the light of the prior art how is the product of the patent, as a *product,* to be regarded as patentable?

It is submitted that the argument that brings the defendant's product within the claims of the patent for the purpose of declaring infringement is necessarily self-destructive, as it thus establishes claims

which are broad enough to cover the well-known prior art products.

While *process* was disregarded by the Court below in considering the question of infringement, it was treated as of controlling importance in determining the question of patentability.

In considering the question of invention the Court below dealt with three objections, which were thus summarized, (a) that the matter was so "obvious as not to rise to the dignity of invention"; (b) that no one was "entitled to a patent upon the thing or product which has always been produced when the process of making another thing or product was (say) half done," and (c) that the Burchenal article when completed and ready for use "must be old, because other men had earlier arrived at the same chemical result by other paths."

The Court below was of the opinion that the first question was really one "of measuring foresight by hindsight." But in what sense is it to be said that there was either foresight or hindsight? With respect to product or with respect to *process?* It was deemed a sufficient answer to the statement "that any oil chemist could have done the thing" to note "that no oil chemist did do it during the more than a score of years prior to Burchenal's application when cottonseed oil (especcially) as an abundant American product was endeavoring to supplant lard in the American market."

But what was it that "any oil chemist *could have done*" and that "no oil chemist *did*"? So far as *product* was concerned, in chemical characteristics and in ultility it existed in the prior art products by way of anticipation just as clearly as it existed in the defendant's product by way of al-

leged infringement. The distinction, it is submitted, is not with respect to *product*—if there is in this case any basis for a claim of infringement—but with respect to process. It was precisely and only in the process that the oil chemist *did* what it is said *had not been done* before. He produced the same product in a different way.

In dealing with objection (b) the Court below considered that the question presented depended "upon whether the thing produced by partial hydrogenation is a different thing from that which existed before hydrogenation began and that which would exist when it ended." Here it appears that the Court is dealing with the comparison of products, but not, even here, with a comparison of the product which is the subject of the patent and the prior art products as such, either with respect to chemical characteristics or practical uses. The Circuit Court of Appeals, in considering this second objection, was dealing with the question whether "the possibility of invention" ever resides "in noting or discovering a use for something which, if not a by-product, may be termed a half-product or unfinished product of an existing method of procedure." This objection, as defined by the Court below, went only to the point that as hydrogenation of vegetable oils was not new, there must have been a time "during the development of the process when the union of hydrogen had only progressed far enough to convert the liquid into a semi-solid."

But it is evident that this is only a partial view of the situation, and, however the particular point be dealt with, the objection still remained whether the *product* itself—the subject of the patent—was

not old because substantially the same thing had been arrived at by other paths.

This brings us to objection (c). This was the crucial objection which brought under consideration the prior art products with their similar utility and their chemical characteristics so closely resembling those of the defendant's product. And it is the answer to this objection that we earnestly urge should receive the consideration of this Court.

The Court below in its opinion said, in speaking of the third objection to patentability:

> "It may be assumed as true that by the mixture of cottonseed oil and animal stearin *a substance can be produced which for practical purposes is the same thing as Burchenal's chemically changed cottonseed oil, but one is a mixture and the other is not, and assuming the difference to be unimportant from the standpoint of either chemist or cook, it is a vital difference from that of the law.*" (Opinion, C. C. A., Appendix to Petition, page 5. Italics ours.)

This we conceive to be the pith of the matter. And the difference of the law, if there be one, we submit is not at all with respect to *product* but with respect to *process.*

So far as the *product* is concerned, the question of the law is the question of chemist and of cook. The question of the law, in dealing with *product,* irrespective of process, is a question of *identity* and a question of *utility.*

If the differences between the defendant's product and the patented product with respect to *chemical characteristics* or with respect to *lard-*

likeness are not deemed to be material, from the standpoint of the patent in suit, then the differences between prior art products and the patented product with respect to chemical characteristics and lard-likeness are likewise immaterial, for here we find the defendant's product and the prior art products similar to each other, and alike in their differences as compared with the patented product. In dealing with lard substitutes, assumed to have substantially the same chemical characteristics and to have such a common lard-likeness that "for practical purposes" the substance is the same, it may be said quite as well with respect to the question of patentability of the product as with respect to infringement of the patent that "it makes no difference by what path or process, new or old, inferior or improved, the product is manufactured."

We repeat that when neither chemist nor cook can regard the difference in the lard substitutes as important, the question of law, if there be one with respect to patentability, is necessarily one of *process* and not of *product*.

It is said that while the prior art products and the patented product are for practical purposes the same substances, the one is a "mixture" and the other is not.

But what is a "*mixture*"? It must either be defined in terms of process or in terms of product. The definition in terms of process is immaterial here for we are not dealing with a process patent. We are comparing a *thing* with a *thing*, not a process with a process. In dealing with the patented product, as *product*, if it appears that substantially the same *thing* for the same *uses* had been produced before, it is submitted that it makes

no difference whether the same thing thus produced had been produced in one way or another. The process is not carried over into the product, when we are dealing with a product patent, for, as the Court below has said, it makes no difference by what path that product had been arrived at. Hence it is immaterial, we submit, that the prior art product is a *"mixture"* (i. e., produced by an *act* of mixing), and the patented product is not, for we are not looking to the means or to the process by which the product was obtained.

So far as the products are concerned, we reiterate it makes no difference whether they have been produced by an act of mixing or by the act of hydrogenizing, for, in the last analysis, they are all semi-solid mixtures of solid and liquid fats, and, according to the Court of Appeals, the differences between them are unimportant, and they are for practical purposes the same thing.

> "It is quite obvious that a manufacture, or a product of a process, may be no novelty, while, at the same time, the process or agency by which it is produced may be both new and useful—a great improvement on any previously known process, and, therefore, patentable as such. * * *
>
> "A product or a manufacture had been obtained and had been used in the arts, a manufacture which was the same in kind and substance, and fitted for the same uses as the article of which the complainants now claim a monopoly. That this manufacture may have been the product of one or more different processes is, as we have said, quite im-

material in considering the question whether it is the same as that produced by the complainants."

The Wood-Paper Patent case, 23 Wall., 566, 593-595.

Of course, if the word "mixture" or the words "incompletely hydrogenized" product, are used as a mere designation of the product itself, and not as referring to the process by which the product is made, they are without significance for the present purpose, for in considering the patentability of the plaintiff's product, as compared with the prior art products, we are looking at the *thing* and not at its name or at the term which is used to describe it. For, in the last analysis, all of the products under discussion are mixtures of liquid and solid fats, in such proportions as to secure a semi-solid consistency, and the Court of Appeals has assumed that they are for practical purposes the same thing, and that their differences are unimportant from the standpoint of either chemist or cook.

We earnestly urge that to say that there is invention, and hence a valid product patent, although the same substance for the same uses had been produced in the prior art, because the latter was a "mixture" and the patented product was not, and thus to establish patentability upon the basis of process, while at the same time predicating infringement upon product irrespective of process, is to create a fatal inconsistency in the administration of the patent law. We simply ask that the same rule be applied in determining *patentability* in the light of the prior art as is applied in determining the question of *infringement*.

If the process of manufacture is to be brought in to create a difference, then it must be brought in to exclude defendant's product as well as to exclude the prior art products. If process is not to be brought in, then a holding that the claims of the patent are broad enough to cover defendant's product leads necessarily, we submit, to the conclusion that the claims, in the light of the prior art, cannot be sustained.

> "That which infringes a patent if later anticipates it if earlier."
>
> *Peters* vs. *Active Manufacturing Company*, 129 U. S., 530, 537.

The opinion of the Court below upon the petition for rehearing in no way meets, we submit, these important conditions.

It is respectfully submitted that the writ of certiorari should be granted upon the following grounds:

(1) Because the Judges, before whom the case has been heard in the Courts below, are divided equally in opinion upon a matter of vital importance in the administration of the patent law;

(2) Because the question involved is of the most serious importance to industry and to the public at large, concerning, as it does, commodities in general use alleged to be within the range of the monopoly asserted;

(3) Because the Court of Appeals has established the rule of law that in determining *infringe-*

ment of patents for products, the process of production is to be regarded as controlling, while in determining patentability or validity of such patents, the process of production is to be disregarded.

(4) Because the principle involved in relation to patents for products is of fundamental importance, and in order that confusion in the lower courts be avoided, it is necessary that the Supreme Court should declare the law.

SULLIVAN & CROMWELL,
Solicitors for American
Cotton Oil Company.

CHARLES E. HUGHES,
ROYALL VICTOR,
of Counsel.

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IN THE

Supreme Court of the United States,

OCTOBER TERM, A. D. 1918.

No. 964 [redacted] 93

BERLIN MILLS COMPANY,

Petitioner,

vs.

PROCTER & GAMBLE COMPANY,

Respondent.

RESPONDENT'S REPLY TO PETITION FOR CERTIORARI.

ALFRED M. ALLEN,
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IN THE

Supreme Court of the United States,

OCTOBER TERM, A. D. 1918.

No.

BERLIN MILLS COMPANY,
Petitioner,

vs.

PROCTER & GAMBLE COMPANY,
Respondent.

BRIEF FOR RESPONDENT IN OPPOSITION TO PETITION FOR WRIT OF CERTIORARI.

The petition errs both as to fact and law. It assumes that the product was not new *per se,* and, therefore, errs as to fact. It attempts to apply the law to this error of fact, and, therefore, its legal discussion is directed to an issue having no existence in this case. Even with respect to the moot legal question which it discusses, the petition is also legally unsound in its interpretation of the decisions of this Court.

Although the Court of Appeals in fact found that the patent was for an absolutely new product, an

effort has been made by the statement of the case, and by selecting certain sentences from the opinion of the Court to make it appear that the exact contrary was true, and that the Court of Appeals found that the product was old, but was made by a new process.

This contention is made in the face of the fact that in the first paragraph of the opinion the Court of Appeals found, as follows:

> (1) "The patent declares that
>
> "this invention is a food product consisting of a vegetable oil, preferably cottonseed oil, partially hydrogenized and hardened to a homogeneous white or yellowish semi-solid, closely simulating lard."
>
> "This is a description of a visible, tangible thing which for some years has been manufactured and sold by plaintiff; as to which *there is no evidence that anybody else ever made it before, or that if this product is entitled to patent protection there is any closely related prior art.*"

The petitioner, on pages 3 and 4 of the petition, quoted in support of its above contention certain sentences from the opinion of the Court of Appeals as if the same were findings of the Court, when in fact they were statements of the contentions of the petitioner and not of the conclusions of the Court. This appearance was given to the quotation by the omission of the first sentence of the paragraph from which they were taken. The entire paragraph reads as follows, the first sentence being the matter which was omitted by petitioner in its quotation on page 3 of the petition:

> "The third objection to invention is substantially this: the merit or value of what Burchenal claims and what this plaintiff makes

> and sells, is that it looks like lard, acts like lard, and can be used for the purposes of lard without offending the conservatism of chefs, house wives, and maid servants. But before Burchenal many imitation lards were made by mechanically mixing hard animal fats and cottonseed oil in varying proportions, and some of these mixtures show on analysis substantially the same chemical characteristics as are shown by Burchenal's chemically produced "homogeneous semi-solid". Therefore it is said that to make the same thing as had been made by earlier lard imitators but in a different way, cannot warrant a patent upon the resulting thing, or product, whatever may be true in respect of the process by which that product is reached. This is as much as to say (*c*) that the Burchenal article when completed and ready for use must be old, because other men had earlier arrived at the same chemical result by other paths."

The same misleading tendency is shown in the second quotation made on page 4 by the petitioner from the opinion. We quote again the entire paragraph, the petitioner having again failed to quote the first sentence:

> "For substantially the same reason we think there is nothing in the last (*c*) objection to invention. It may be assumed as true that by the mixture of cottonseed oil and animal stearin a substance can be produced which for practical purposes is the same thing as Burchenal's chemically changed cottonseed oil; but one is a mixture and the other is not, and assuming the difference to be unimportant from the standpoint of either chemist or cook, it is a vital difference from that of the law."

The complete quotations above given consist, first, of a statement by the Court of the Petitioner's

contention and an answer to the same by the Court based upon petitioner's own assumption, the answer of the Court being to the effect that while the old products and the patented product might be used by the cook for the same purpose, or the chemist might find the same number of atoms of carbon, hydrogen and oxygen in the products, yet the components of the two products were entirely different, one being a mixture of two kinds of fats and the other a chemical compound, not a mixture at all.

The third quotation on page 4 of the Petition, making reference to the "synthetic egg", does not support Petitioner's contention that the Court held that Burchenal's improvement was patentably different from the old product only because it was made in a new way. On the contrary, the Court points out that its decision was based on the fact that plaintiff's product consisted "solely of one vegetable oil in a state of arrested hydrogenation". This, as distinguished from the prior mixture of two substances, namely, cottonseed oil and animal stearin mentioned in the proceeding quotation. The "state of arrested hydrogenation" mentioned was a static condition of pervasive but partial hydrogenation.

In the second opinion the Circuit Court of Appeals also said:

> "It seems to be now assumed that hydrogenized oil, as a substitute for lard, is so *superior to an amalgam, combination or mixture,* of oil and animal fat, or oil and stearin artificially produced, that the patent in suit is almost basic instead of disclosing a mere variant among products of equal utility.
>
> Defendant's petition restates with painstaking ability an argument perfectly good, if the

premise be admitted. That premise is that Burchenal invented nothing but an artificial lard or lard substitute so near to existing articles of commerce that the only field open to him was limited to a particular mode of making, or by specially stated chemical tests.

Our decision is and has been based, on a firm conviction, that what is practically lard, consisting *solely* of one vegetable oil in a state of arrested hydrogenation, is *a new thing* in the sense of the patent law.

The results of such evolutionary treatment, are *by their genesis* so novel, that analysis of constituents is immaterial. Patentable novelty is not in their parts—as revealed by quantitive analysis, but in a practical functional identity between animal products, and a vegetable product as chemically changed."

Where the Circuit Court of Appeals refers to the similarity in chemical analysis, it constantly refers to the dissimilarity in other respects by designating the prior art as "mixtures", "made by *mechanically* mixing hard animal fats and cotton-seed oil"; stating that notwithstanding the similarity in chemical analysis, "one is a mixture and the other is not", and pointing to the fact that things so different as steam, water and ice have the same chemical analysis.

The opinion also regards the word "homogeneous" of the claim as being in contradistinction to a mechanical mixture; saying, "homogeneous in the sense of mixtureless, and wholly consisting of an incompletely hydrogenized cotton-seed oil". This is evidently the sense in which the word is used in the claim of the patent, as explained by the specification.

In *Kuehmsted* v. *Farbenfabriken,* 179 Fed. 703, the Circuit Court of Appeals for the Seventh Cir-

cuit, in sustaining the Aspirin patent as patenting a new product, found that there was no distinction against the prior art in chemical analysis, but held as follows:

> "The fact that the formulæ are identical cuts little figure. A chemical formula is simply the symbolical expression of the composition or constitution of a substance; * * * assuming that the formula actually expresses the constitution of the substance chemically, the substance physically, and in consequence therapeutically, may be widely different."

Very many substances giving precisely the same chemical anlysis differ widely in characteristics and utility. The example of this most commonly given is the identity in chemical analysis of the diamond and charcoal.

The radical difference between the homogeneous product of the patent and the mixtures will be appreciated when we say that the mixtures were, in large part, the untreated oils, which constituted from *eighty-five* to *ninety* per cent. of the whole.

The fact to which we have to apply the law, therefore, is that the product is new *per se* and was so held by the Circuit Court of Appeals. That it was useful is not questioned and is shown by the sales of it by both plaintiff and defendant. It is, therefore, within the language of the Statute, "a new and useful * * * manufacture or composition of matter", which is a prerequisite of patentability.

Whether it is any more useful than the prior art mixtures is immaterial. Even assuming it is only equal in utility with them, still its production is an advance in the art, because the multiplication of products of equal utility is always desirable. We

do not, however, understand the opinion of the Circuit Court of Appeals to say that it has not greater utility than the mixtures. We understand the language of the Court at one point, merely to assume the defendant's position, that its superiority is unimportant—"assuming the difference to be unimportant from the standpoint of either chemist or cook". At another point, that the product "is so superior to an amalgam, combination or mixture of oil and animal fat, or oil and stearin artificially produced, that the patent in suit is almost basic, instead of disclosing a mere variant among products of equal utility".

The distinction between the "mixtures" or "compounds" of the prior art and the chemical product of the patent in suit is well shown by the statements in the pamphlets of instruction issued by the defendant as to its infringing product, "Kream Krisp", and introduced, by stipulatiton, in the record as Exhibits A, B and C (Rec. pp. 805-807). This will appear from a brief reference to these pamphlets.

Exhibit A (Rec. p. 806) refers to the mixtures as "oil compounds" and says that many people refuse to use them, and that the new product "shortens better than * * * any 'compound' ". Also that the new product "does away with the beef stearin and "other stiffening ingredients". Also that it "is a wonderful improvement over * * * the so-called 'compounds' ".

Exhibit B says that "cooking compounds containing such 'oils' have beeen used as cheap substitutes". Also that the new product "contains no oil itself" and "for this reason Kream Krisp has been called one of the most notable discoveries in pure-food chemistry of the present day". Also "it contains no hard fats".

Exhibit C says (Rec. p. 807), "It contains no tallow, beef stearin, or any other hard, indigestible ingredients". Again, "it contains no beef stearin, or other hardening material, to hold it in proper consistency". It also says, "cooking compounds containing such oils * * * have been used as cheap substitutes". Also that the new product "contains no oil itself" and "for this reason * * * has been called one of the most notable pure-food discoveries of the present day". Also that "it contains no hard fats".

Surely nothing could be stronger as to the distinction between the product of the patent and the prior art "mixtures" or "compounds" than these statements by the defendant itself. They completely disclose the fallacy upon which the petition is founded and support the novelty of the product *per se*.

The Wood-Paper Patent, 23 Wallace, 566.

Petitioner's brief refers primarily to this case, saying (p. 7), "that the time has arrived when the ancient decisions of this Court, above referred to, should be reaffirmed and re-established", and assumes that the decision of the Circuit Court of Appeals in this case is in conflict with them.

There is no conflict whatsoever, as a brief consideration of the facts in the Wood-Paper Patent Case will show. The claim of the Wood-Paper Patent is given as follows (23 Wallace, 577):

> "What we claim, &c., as the invention of Charles Watt and Hugh Burgess, as a new article of manufacture, is a pulp suitable for the manufacture of paper, made from wood or other vegetable substances, by boiling the wood or other vegetable substance in an alkali under pressure, substantially as described."

It will be observed that the only description of the product *per se* in this claim was by the words, "a pulp suitable for the manufacture of paper, made from wood or other vegetable substances". The Court found (p. 594), quoting the claim:

> "If, then, the Watt & Burgess patent for a product is sustainable it must be because the product claimed, namely, 'a pulp suitable for the manufacture of paper, made from wood or other vegetable substances,' was unknown prior to their alleged invention. But we think it is shown satisfactorily that it had been produced and used in the manufacture of paper long before 1853, the year in which the original patent of Watt & Burgess was dated.
>
> The pulp which had been obtained by others from rags in large quantities, and from straw, wood, and other vegetable substances to a lesser extent, was undeniably also cellulose, suitable for manufacturing paper, and, so far as appears, equally suitable. The substance of the products, therefore, was the same, and so were their uses. The design and the end of their production was the same, no matter how or from what they were produced."

The Court also called attention to the fact (pp. 593-4) that the process specified in the claim as "by boiling the wood or other vegetable substance in an alkali under pressure", like the prior art process, was simply a process of extraction, saying,

> "But the extract is the same, no matter from what it has been taken."

Therefore it is clear that the claim of the Wood-Paper Patent specified no novelty whatsoever in the product by merely saying, "a pulp suitable for the manufacture of paper, made from wood or other

vegetable substances". Those words read literally upon the product found to be old in the prior art.

This fact entirely distinguishes the Wood-Paper Case from the instant case. Here the description of the product in the Burchenal claim distinguishes against all products in the prior art, which were of three kinds.

(1) Unconverted cotton-seed oil—a liquid.

(2) Completely converted cotton-seed oil—a hard solid.

(3) A mixture of from eighty-five to ninety per-cent of (1) with from ten to fifteen percent of (2).

Burchenal's claim distinguishes against both (1) and (2) by the word "lard-like", which certainly sufficiently distinguishes against a liquid, on the one hand, or a hard solid, on the other.

The Burchenal claim is distinguished from (3), a mixture, by the word "homogeneous" and the words "consisting of an incompletely hydrogenized", used in contradistinction to what the specification refers to as (p. 1, line 93) "commercial mixtures" or (p. 2, line 9) "commercial lard substitutes containing this oil".

The mixture of ninety percent of oil with ten percent of the solid is a mechanical mixture and continues to be a mechanical mixture until used, just as would be the mechanical mixture of salt and flour. So far as appears, the two substances in admixture do not merge into each other chemically so as to modify either of them to any degree whatsoever. They form no chemical union with each other and are, therefore, entirely distinct from the "homogeneous" "incompletely hydrogenized" chemical of the claim. They are as distinct from

each other as would be a mixture of salt and flour from (if such a thing were possible) a chemical union between salt and flour, having approximately similar qualities in cooking with the mixture.

Merrill v. Yeomans, 94 U. S. 568.

This is the second case cited in petitioner's brief. It did not involve the present question at all, and in so far as the dicta which it contains, is distinctly favorable to our patent.

The question necessary for the decision in *Merrill* v. *Yeomans* was not whether the product *per se* was patentable, but whether the words of the claim were for the product or for the process. It was held that the words of the claim were for the process and not for the product, and, therefore, were not infringed, because the defendants were merely dealers in the product and not manufacturers of it, and had not practised the process. There is, of course, no such question here. The words of our claim are clearly for the product.

But the opinion in *Merrill* v. *Yeomans* is plainly in our favor. It held that the product was patentable and that a patent for it would have been valid, and it suggested a re-issue in order to cover it.

And the language which the Court suggested as a valid claim was, "deodorized heavy hydrocarbon oils fitted for use in the arts".

The opinion (p. 569) states that the novelty of the product was "its freedom from the offensive odor which, before his invention, seemed to be an inseparable quality of those oils". It was, therefore, merely a purification process, removing the odoriferous impurities by distillation. The oil itself existed in the undistilled raw material, but it was improved by purification from odoriferous impuri-

ties. The Court held (bottom p. 569) that the inventor had a right to a patent for three inventions; the first being the apparatus; the second being the process, and the third being:

> "3. For the product of this new process of distillation; namely, the *deodorized heavy hydrocarbon oils fitted for use in the arts.*"

If, therefore, the Merrill patent had contained a claim in the words "deodorized heavy hydrocarbon oils fitted for use in the arts", this Court would have sustained it. If so, why should not the Burchenal claim be sustained even though it contained only the words "an incompletely hydrogenized vegetable oil". No reason is seen why it should have been any more possible to describe the novelty of the Merrill patent by the word "deodorized" than it is to describe the novelty of the Burchenal product by the words "incompletely hydrogenized".

But the Burchenal claim is better than that because it also specifies that the "incompletely hydrogenized vegetable oil" is "a homogeneous lard-like food product", and, therefore, the Burchenal claim remedies every objection that might have been raised to the form of claim which this Court suggested for the Merrill product.

Powder Co. v. Powder Works, 98 U. S. 126.

This is the third and only other case cited in the petition.

It did not involve the question in this case, but the language of the opinion is clearly favorable to the Burchenal claim.

The only question in *Powder Co.* v. *Powder Works* was whether the reissue was invalid as being

for a different invention from the original. The difference between the inventions of the original and reissue were stated by the Court (p. 133) as follows:

> "The original patent was for a process, to wit, a mode, or different modes, of exploding nitro-glycerine; whereas the reissues are for manufactured compounds or mixtures, namely, mixtures of nitroglycerine with gunpowder, gun-cotton, and rocket powder."

There was no controversy as to the novelty or patentability of the process of the product if it had been properly claimed in an original patent, but the Court held (p. 137) that

> "The invention of the one did not involve the invention of the other. The two inventions might have been made by different persons, and at different times.
>
> We think, therefore, that the conclusion is irresistible, that the two reissued patents * * * are for a different invention from that described or suggested in the original patent."

Since our patent is an original patent, it is not understood why the petitioner refers to a case having to do only with the reissue question.

But *Powder Co.* v. *Powder Works* is authority for a legal proposition which is distinctly in favor of the patentability of the Burchenal claim. It approves (p. 137) the decision of Mr. Justice Grier in favor of the Goodyear patent, saying:

> "In another case, arising on the original patent of Goodyear, reported in 2 Wall. Jr. 356, Mr. Justice Grier used this expression: 'The product and the process constitute one discovery'. The product in Goodyear's invention

> was the direct result of the process. They were parts of one invention, and, except in imagination, could no more be separated from each other than the two sides of a sheet of paper, or than a shadow from the body that produces it."

Powder Co. v. *Powder Works* is, therefore, authority for the proposition that a product is patentable although it be so inherently related to the process as to "constitute one discovery". Therefore the discovery by Burchenal that "a homogeneous lard-like food product" might be produced by "incompletely hydrogenizing vegetable oil" would, under this doctrine of *Powder Co.* v. *Powder Works,* entitle the discoverer to a patent for the product of the process.

Krementz v. Cottle, 148 U. S. 556.

In this case the claim of the Krementz patent was as follows:

> "A collar or sleeve button having hollow head and stem, the said head, stem and base plate or back of the said button being shaped and made of a single, continuous piece of sheet metal, substantially as herein shown and described."

Judge Wallace, in the lower court, cited the decision of this Court in the Wood-Paper Patent Case as authority for holding this Krementz claim invalid, on the ground that the process for making the button was the only thing patentable, because when completed the button was the same as prior buttons made in several pieces and united; saying (31 Fed. 43):

> "The orator invented a mode of making such buttons which was new and very useful, and

> for which he deservedly had a patent; but the buttons, when made, were not new, except that they were made by that new mode. For them there was no ground for a patent. In the old buttons the post and back were not formed of one piece, but when they had been united, and become, with the head, a button, they were of one piece for the purposes of the button, as much as if they had always been in one piece."

This Court, however, reversed Judge Wallace, holding that the product as well as the process was patentable.

There is the following analogy between that case and this. Here the prior art referred to in the patent as "commercial mixtures" were made in two parts—the liquid oil and the hard fat. The mixing of them together was analogous to the uniting of the separately-made parts of the prior art button. Krementz made his button in one piece, which was held patentable, doing it in a single mechanical operation. Burchenal makes his product, so to speak, in one piece and by a single chemical operation, and defendant has done likewise. It certainly follows, therefore, that the Burchenal product is patentable and is infringed.

So far as the proposition of law is concerned, the language of the Court of Appeals in discussing the question of infringement makes it evident that it was in full accord with these decisions. The Court said:

> "It is true (*b*) that defendant's process of manufacture is very different from that of plaintiff, and we are willing to assume it different from and better than anything known to Burchenal or developed by Kayser. But this patent is upon a product, and if the product complained of is the patented article substan-

> tially as described, it makes no difference by what path or process, new or old, inferior or improved, the infringing product is manufactured."

There is no justification, therefore, for paragraphs VII-X of the present petition, in which it is contended that the holding of the Court strikes down all distinctions between the various patentable subjects-matter defined by the statute, and that it is at war with the decisions of this Court defining the differences between processes and products considered as patentable subjects, or that the ancient decisions of this Court should be reaffirmed and re-established lest the inferior Courts stray farther and farther from correct principles.

Far from failing to distinguish between products as products, and products made by a particular process, the opinion of the Court of Appeals could not have more completely followed the decisions of the Court, cited by the petitioner, than it did.

The Decision Is of No Vital Interest to the Public.

The second ground for the petition has as little foundation as the first ground. It is the contention that the decision is of vital interest to the public. The reason for this contention is stated on page 8 of the petition as follows:

> "The patent has been so broadly construed by the Court of Appeals as to substantially cover all semi-solid edible fats of vegetable origin, notwithstanding that such products are indistinguishable by chemist or cook from prior art products."

There is nothing in the opinion of the Court of Appeals which in any way justifies such a contention.

The decision clearly and unmistakably limits the patent to a product which contains no free cottonseed oil and is the result of stopping the hydrogenation process partway, to a "half done" product of hydrogenation as it characterizes it, and no semi-solid vegetable fats which are mixtures containing free cottonseed oil are included in the scope of the patent.

So far as appears from the record, the plaintiff and the Berlin Mills Company are the only concerns in any way interested in the issues, for the reason that the Berlin Mills Company is the only company that is infringing the patent in suit.

The fact is that millions of pounds of lard compounds are manufactured weekly in the United States, comprising semi-solid edible fats of vegetable origin which are mixtures and which, therefore, do not come within the terms of the claims of the patent in suit. Wm. D. Richardson, chief chemist for Swift & Company, of Chicago, manufacturers of tremendous quantities of edible fatty products, testified (Rec. p. 559):

> "Q. 48. Are lard compounds of that composition; that is to say, of refined cottonseed oil and of hydrogenized cottonseed oil of the degree of hardness which you have mentioned likewise sold in large quantities by Swift & Company? A. Yes.
>
> Q. 49. To what extent? A. I have not the figures; the figures would be quite large. I do not think I would say offhand just how much of that is produced now.
>
> Q. 50. Can you give us some minimum quantity as their output of manufacture and sale? A. It might be in the neighborhood say

of 1,000,000 pounds a week; something like that; it might only be half a million. I cannot tell.

Q. 51. Of this particular product made of refined cottonseed oil and hard hydrogenized cottonseed oil? A. Yes.

When asked (Q. 72) whether they made any of the product of the patent in suit, he says—"No, we do not make such product."

Swift & Company was only one of a great number of concerns engaged in the manufacture and sale of lard substitutes.

It would consume more space than would be justified to review the situation from the point of view of the industries alleged to be affected; but it can be confidently asserted that the vast bulk of lard substitutes comprising semi-solid edible fats of vegetable origin are mixtures and not chemical products which would in any way fall within the terms of the claims of the patent in suit as sustained by the Court.

Reply to Brief filed by the American Cotton Oil Company, as Amicus Curiae.

Since preparing the foregoing reply to the petitioner's brief, we have been served with a copy of the brief of the American Cotton Oil Company in support of the petition. This brief is practically the same as the brief filed by it in support of the petition for rehearing before the Court of Appeals, and as the Court said about the petition for rehearing, states "an argument perfectly good, if the

premise be admitted". Commenting upon this brief, the Court said:

> "The principal producer of cottonseed oil has joined in this application as *amicus curiæ* and by figures of oil production as well as of food products derived therefrom, has greatly magnified the importance of Burchenal's patent.
>
> It seems to be now assumed that hydrogenized oil, as a substitute for lard, is so superior to an amalgam, combination or mixture, of oil and animal fat, or oil and stearin artificially produced,—that the patent in suit is almost basic, instead of disclosing a mere variant among products of equal utility.
>
> If this importance in result be real, it is a reason for giving to the claims in suit a broad range of equivalents; and suggests reflections not contained in our former opinion, but leading to an identical result."

The figures of cottonseed oil production and of lard substitutes manufactured therefrom, are given on page 2 of the present brief, from which it appears that more than 86% or 1,069,214,000 lbs. of cottonseed oil was used in the manufacture of lard substitutes during the year 1917.

If it be assumed that this figure includes plaintiff's manufacture of Crisco or the product of the patent in suit, it will be found, by reference to the Record (p. 451, Q. 16), that the amount of Crisco would be in the neighborhood of 6 per cent. of the above total. The record shows that, beginning December 31, 1913, and extending up to December 31, 1916, plaintiff's manufacture of Crisco rose from 24,000,000 pounds to 60,000,000 pounds. The testimony does not give the figures for 1917, but the amount for 1916 was 60,500,000 pounds. Assuming a natural increase for 1917, the relation of the

amount of cottonseed oil used for the manufacture of the patented product to the amount used for the manufacture of lard substitutes generally, would be, as we have stated, in the neighborhood of 6 per cent.

This fact will show that there is no foundation for the apprehension expressed by petitioner and by the *amicus curiæ* as to the effect upon public interest of the decision of the Court of Appeals in sustaining the patent. It is apparent that neither the users of lard products generally, nor the growers of cotton, peanuts and other oil-producing vegetable products, nor the manufacturers of cooking fats therefrom, are in any way injuriously affected by such decision. Plaintiff, so far from restricting the free use of vegetable oils for edible purposes, or in any way interfering with the free manufacture or sale of lard substitutes, simply opened up another outlet for the use of such oils and gave the public another article of food.

The unfairness of this reference to the extent of the lard and lard substitute industry is further evident as the *amicus curiæ* makes no effort, except by implication, to show that the industry as a whole is affected by the decision.

The interest of the *amicus curiæ* in this controversy is not clear. It is the largest manufacturer of cottonseed oil in the country and is not engaged in the manufacture of the patented product, so far as we are advised. The only manufacturers of the patented product are the plaintiff and defendant, and the defendant is the only infringer. All the rest of the public have respected plaintiff's rights in the patent.

The next point in the *amicus curiæ* brief is that the Court of Appeals erred in adopting one rule

for novelty and another rule for infringement. That is, that it sustained the patent on the ground of novelty of process, but found infringement against a product corresponding to the products of the prior art, regardless of process.

This point is based upon the premises, (1) that the patented product is like the prior products in chemical characteristics, and (2) that for practical purposes the prior product is the same thing as the patented product.

These premises purport to be based upon the findings of the Court of Appeals, but, as we have shown in connection with substantially the same contentions in the petitioner's brief, there is no foundation for such an assertion, because the statements in the opinion of the Court of Appeals upon which the same is based were not findings of the Court, but recitals of contentions of the defendant, and the tentative assumption of the same in the discussion of various points. The quotation beginning on page 5 of the *amicus curiæ* brief, is a partial quotation from defendant's statement in regard to the prior art, and the quotation on page 6 of the said brief is a similar partial quotation of the answer of the Court to the contention of defendant. The premises of the brief, therefore, are without foundation, and the conclusion necessarily falls.

We wish, however, to state that plaintiff does not assent to the proposition that the patented product cannot be distinguished from the prior product by either chemical characteristics or utility, or to the proposition that the defendant's product differs from the prior product only by the process of its manufacture. This is not the occasion on which to discuss questions involving an examination of the evidence, but there are certain obvious facts, fundamental to the situation, which may be

taken into account to test the correctness of the assertions upon which this petition is based and to determine the truth of the same.

In regard to the chemical characteristics: The prior mixtures were composed of two ingredients, to wit: 85 per cent. to 90 per cent. of free cottonseed oil, with 15 per cent. to 10 per cent. of hard stock or stearin. These were mixed mechanically and there was no chemical change. The purpose of the addition of the stearin was to thicken the cottonseed oil and bring it to a semi-solid condition, resembling the condition of ordinary lard. The presence of this large quantity of free or unchanged cottonseed oil rendered the mixture extremely liable to oxidation, producing rancidity; and also to the separation by gravitation of the ingredients into layers, impairing its edibility and usefulness.

The patented product is a synthetic product produced from a single ingredient, to wit: cotton seed oil, in which no free cottonseed oil is present. The criterion laid down in the patent for distinguishing it chemically from prior products is stated as follows (Burchenal Patent, p. 2, line 7): "It shows no free cottonseed oil when subjected to the Halphen test, thereby differing from all commercial lard substitutes containing this oil."

Here then, without going farther than the patent itself, is a chemical test which distinguishes the patented article from all prior products. Whether it is possible to determine the difference by chemical formula is of no moment. If we accept the testimony of defendant's expert, Research Chemist George A. Richter, this would seem an impossible task (Rec. p. 619).

As to utility: The Court's assumption that for practical purposes the prior mixtures might be the same thing as the patented product and still be

patentable, will be understood when it is remembered that the object of all manufacturers of lard substitutes was to produce an article which for practical purposes would correspond with lard. Ordinary lard was the standard to which all manufacturers of substitutes sought to conform. If they did not, their product would not sell. So that it was necessary that the plaintiff's Crisco, as well as the prior mixtures, should, for practical purposes, be the same thing to the cook as lard, and hence necessarily, alike in this particular.

But resemblance in this particular does not determine the question of identity between the prior mixtures and the synthetic single material of plaintiff and defendant, for in other respects the latter differ widely and fundamentally from such mixtures. In the first place, they have present no free cottonseed oil, embodying the germs of rancidity. Then, as we have pointed out in reply to the petitioner's brief, the petitioner has no difficulty in distinguishing its synthetic product from the prior mixtures, or hesitation in proclaiming its useful characteristics over the same. Moreover, the record shows that for cooking purposes the patented article is better in many respects, some of which are set forth in the Burchenal patent, than prior mixtures, and even than lard itself (see testimony of Morrison, Rec. p. 781, Qs. 57-70).

It was, therefore, unnecessary for the Court to bring in the process of manufacture either to sustain the patent over the prior art or to hold that defendant's product was an infringement of the claims in suit. The prior mixtures do not correspond to the patented product because they do not stand the chemical test laid down in the specification, and necessarily could not, because they were composed mainly of free cottonseed or other vege-

table oil, while, on the other hand, petitioner's product does meet the said chemical test.

The prior mixtures do not correspond to the patented article in respect to utility, because while they are sufficiently like lard to be useful for cooking purposes, yet they are far inferior to plaintiff's Crisco, as pointed out in the patent, and to petitioner's Kream Krisp, as claimed in defendant's pamphlets.

Conclusion.

We respectfully submit that the petition for *certiorari* should be denied: (1,) because the question is not of public importance, nobody being interested in the matter except the parties to the bill; (2,) because there was neither error of law nor of fact in the decision of the Court of Appeals; and (3,) because there is no danger of confusion arising by reason of the decision in this case.

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April 19, 1919.